

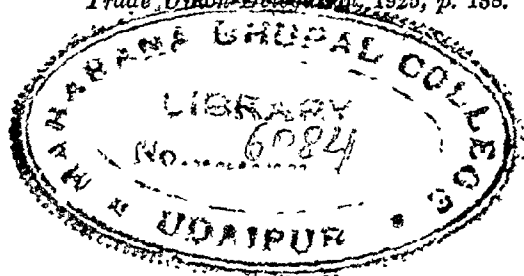
EDUCATION IN SOVIET RUSSIA

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By
SCOTT NEARING²

"There has probably been no greater revolution of ideas than in the new educational system as practiced in Soviet Russia."

Russia Today—Report of the British Trade Union Delegation, 1925, p. 188.



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FOREWORD.

PEOPLE outside of the Soviet Union have heard a great deal about Soviet politics and something about Soviet economics. They have had almost no information about Soviet education. This is a pity.

Nothing that is going on in the Soviet Union at the present moment is more important for the remainder of the world than the work in education. The most extensive educational experiments that can be found anywhere are now being made in the Soviet schools. Elsewhere there are a few centres of experimental education. Quite frequently these are located in expensive private schools to which only the children of the rich can go. In no case is there more than a small fraction of the educational work of any country on an experimental basis.

Soviet education is practically all experimental. The Revolution of 1917 tore the old social system up by the roots. The Civil War cleared away much of the debris. Since 1921 and 1922, therefore, the educational authorities of the Soviet Union have had a relatively free field in which to solve their educational problems in a way that would meet the peculiar needs of their new social order.

Already they have made such progress that the British Trade Union Delegation of 1924 was able to report that "there has probably been no greater revolution of ideas than in the new educational system as practiced in Soviet Russia." (Report p. 138.) Brailsford caught the spirit of the movement back in 1921. The Communist Dictatorship, he wrote, "is ripening the whole Russian people for responsibility and power by its great work for education. . . . It has, moreover, based its entire system of education, not on any principle of passivity, receptivity and discipline, but rather on 'self initiative' and activity."

(H. N. Brailsford, *The Russian Workers' Republic*, p. 73.)

There is as yet no Soviet educational system. The entire educational world of the Soviet Union is still in an experimental stage. Practice differs widely in schools that are located close together, in the same republic or even in the same city. Certain theories are commonly accepted, but there is a great variety in the interpretation that is put upon them. It is from this variety and from the discussion arising out of it that the Soviet education of the future is being built.

When the Revolution of 1917 freed the Russian school authorities from the bonds of the old order and threw upon them the responsibility of formulating a new method of education that would meet the needs of a workers' republic, they began combing the world for suggestions. Books on psychology, pedagogy and educational method were translated from German, French and English. The work of American schools received special attention. Kilpatrick, Thorndike, Dewey and other American educators are almost as well known in the Soviet Union to-day as they are in the United States. All of these foreign methods and theories were examined and valued. Extensive experiments have been made with all of them in the Soviet schools. As a result certain lines of Soviet educational policy are being inaugurated by the school authorities.

The Soviet Union is to-day an educational laboratory. Experiments are under way with subject-matter, with methods of instruction, with social organization among the pupils, with the organization of educational workers, with the organization of school directing committees and with the problem of opening the higher schools to the workers and peasants. In none of these fields has any permanent system been established. In all of them the educational authorities are looking for the correct answers to their questions and their needs.

Some of the older educators are non-plussed and discouraged by this lack of unity and of established form in

the Soviet educational institutions. One of them, who had been a professor of pedagogy for many years said: "There is no educational system in Russia to-day. There is only a religion. There have been and still are good experimental schools in the Soviet Union, but the general educational system is in hopeless chaos."

Another professor of pedagogy was more realistic: "You will have great difficulty in understanding what is going on here in the educational institutions. We do not understand it ourselves. Come back in fifteen or twenty years, and by that time we may have a school system. We have none to-day."

It is that very fact that makes the Soviet schools so important to educators in other parts of the world. Soviet school authorities have no system. They have been compelled to start from the bottom, in the second decade of the twentieth century, with the educational experience that has been accumulating in all parts of the West during the past thirty years as a background. To-day they are working with desperate energy and enthusiasm to create a system. If they can have an uninterrupted decade they should be able to produce educational forms that will serve as patterns wherever capitalism gives place to the workers' state.

Educators in every other country labor under the weight of mountain-high traditions. Their hands are tied with educational conventions. Established economic institutions have a firm grip on the educational system, and refuse to permit serious modifications in its forms or activities.

Soviet educators were freed from most of this institutionalism by the Revolution. The wiping out of old economic and political forms enabled them to start afresh. Probably not since the period of the French Revolution have educators been so free, anywhere in the world, to shape their work in accordance with current social needs.

Two problems are paramount: (1) to determine what these social needs are; (2) to decide how best to meet

them. It is the answer to these two problems that Soviet educators are now seeking.

Educational experimentation in the Soviet Union is not confined to the schools. The school system proper makes up only one part of Soviet educational activity. Educational work is being carried on through the following channels:

1. The educational institutions directly under the control of the departments of education. This includes:
 - a. Pre-school work with children between three and eight years of age.
 - b. The formal school system, extending from the first grade of the elementary schools through the higher technical schools, universities and institutes.
 - c. Experimental schools within this school system.
 - d. Extension and extra-mural work.
 - e. Publications.
 - f. Theatres, libraries, museums.
2. Villages are establishing reading-rooms, libraries, and local culture centres where lectures, classes and other educational activities are carried on.
3. The trade unions have an elaborate and very extensive system of clubs, classes, libraries.
4. The Communist Party, the Young Communists and the Pioneers carry on political education, classes for the liquidation of illiteracy and some technical training classes.
5. The army is an active educational centre. The recruits are expected to learn reading and writing within the first thirty days of their stay in the army. They also have regular classes in social science, in technical and in cultural subjects.
6. The Soviet press, for the publication of books, magazines and newspapers, is on an educational basis. It is linked with the formal school system and maintains a definite educational aim.
7. Other organizations like the co-operatives, the de-

partments of health and the departments of agriculture carry on educational work on a large scale.

Here it will be possible to write about only that portion of Soviet educational work which is directly connected with the education of children through the schools. The other fields are no less important. In many ways they are even more worthy of attention because they are more unique, but it is not possible to cover the whole field in one small book, and I have not the material which would be needed in order to treat them adequately.

About the formal school work for children that is being carried on by the Soviet educational authorities I cannot write with any great exactitude. I had neither the time nor the means to give the matter careful study. I can merely relate what I have seen and heard in the institutions that I visited. Some of them were undoubtedly "show" schools. Others were unquestionably below the level of average Soviet education. Some well-staffed teachers' college should put a corps of investigators into the Soviet Union and keep them there until they have a good picture of what is going on in the schools. The task of making such a study is quite beyond the energy of an individual.

My inquiry into Soviet education began quite accidentally. A year ago, while working over some material on education, I came to a place where I needed a little data on Soviet schools. I went to the libraries, naively expecting that it would be a simple matter to locate an adequate amount of information on the subject. What was my surprise to discover that there was practically no literature, either in French, German or English, on the work that the Soviet schools were doing. With the exception of a few chapters here and there, written by visitors to the Soviet Union who were not particularly familiar with educational matters, I could find nothing worthy of note. The educational periodicals were as barren as the book shelves.

I have ever witnessed. Judging from a brief two-months survey, it will also be a fruitful source of educational knowledge and progress.

Visiting schools in the Soviet Union is an experience,—stimulating, unforgettable. The children are as glad to see you as are the teachers.

Outside of the big centres, the school children have never seen an American. They were babies when the war broke out, and they have been blockaded away from the West ever since. But they have read Jack London and Upton Sinclair. They know of Henry Ford, of the Ku Klux Klan, and of the "Monkey Case" at Dayton, Tennessee. They have seen Charlie Chaplin and Douglas Fairbanks on the screen. They have pictures of Indian chiefs in their war-paint, of cattle round-ups and of all the doings in the "Wild West." This is quite generally true of the children in the upper elementary classes and in the high schools. Consequently these children ply the visitor with innumerable questions. Nor are they ignorant of politics and economics. They want to know why the United States does not recognize the Soviet Union, how strong the radical movement is in the United States, and why the American Federation of Labor is so conservative. These young folks have real international interests. They have heard and read a great deal and they are anxious to know more.

When you get through looking over the class work and talking to the pupils, the teacher takes you to one side and begins: Just how is the Dalton plan succeeding in the United States? Where is the project method being tried? What is being done with intelligence tests in America? Who is your best man on physiological psychology? How much self-government do you have among the children in your schools? These questions are not asked by every teacher, of course, but in practically every school there are specialists who are making a study of some phase of education. These matters are discussed constantly, and

any light that an outsider can throw on them is eagerly welcomed.

There was hardly a school person with whom I talked in any detail who did not say: "Is that all you wanted to ask? Well, since you have finished with your questions, I should like to ask some myself."

Another sentence was repeated again and again: "Now that you have seen the school work, would you mind telling us what you think of it, and what suggestions you have to make?" All of the school people seemed to be searching for knowledge and very eager to get new ideas.

Sixty days in the Soviet schools did not permit me to make an investigation of Soviet education. In all I saw only about seventy schools. I did not study any of them thoroughly. The following pages contain merely a series of pen-pictures. I feel justified in printing them, however, because there is little first-hand information in English on Soviet education, and because I believe that the educators in other countries should realize the importance of the educational experimenting that is now taking place in the Soviet Union. To the scientific student of education the Soviet schools present a rare opportunity. There his pet theories and programs are being tried out on an immense scale. The Soviet Union is, at the moment, the world's largest and most important educational laboratory, and the educational organizations, institutions and departments of the leading countries should have their experts in the Soviet Union now, collecting information and making suggestions.

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I. A DARK EDUCATIONAL PAST.

Educationally, in the opening years of the twentieth century, Russia was one of the darkest countries in the world. The extent of illiteracy among army recruits gives a good idea of the relative position that Russia occupied in this respect among the nations of Europe. Among Belgian recruits, eight per cent were illiterate; among French recruits, four per cent; among recruits from the United Kingdom, one per cent; among German recruits, one-twentieth of one per cent, but among Russian recruits, 62 per cent of the men were illiterate.

This illiteracy was perpetuated in Russia as a part of the governing policy of the Czarist bureaucracy. "The Imperial Government, far from trying to stimulate educational activities, did everything in its power to hamper the work of enlightenment." (Leo Pasvol'sky, *Educational Rev.*, vol. 62, p. 210, 1921.)

"Education was intended for the privileged classes only." (Theresa Bach, *Educational Changes in Russia*, U. S. Dept. of Education, Bul. 37, 1919, p. 4.) Obstacles were placed in the way of peasant children and working-class children who desired to acquire higher education. "The fourth Minister of Instruction, Shishkov, with the approval of Czar Alexander and in his presence, issued the following statement:

"Knowledge is useful only, when, like salt, it is used and offered in small measures according to the people's circumstances and their needs. . . . To teach the mass of people, or even the majority of them, how to read will bring more harm than good." (*Ibid.*)

The proportion of Russian children in school was extremely low. A. N. Kulomzin, a Russian educational authority, estimated in 1904 that twenty-three per cent of the entire population of the United States were in school. In the German Empire, the percentage in school was nineteen; in England, sixteen; in France, fifteen. In Russia, 3.3 per cent of the entire population were in

school. (V. G. Simkhovitch, *Educational Review*, May, 1907, p. 520.)

The officials of the Central State exercised an immense power over these meagerly attended schools. They regulated the subjects taught, the activities of the teachers, and the conduct of the students.

Here is a school program designed for primary schools in which the children stayed for at least three years:

Religion	6	hours	per	week
Church Slavonic	3	"	"	"
Russian	8	"	"	"
Writing	2	"	"	"
Arithmetic	5	"	"	"

"Three hours a week in addition are assigned to church singing." (*Education in Russia*, British Board of Education, Special Reports, 1909, p. 240.) This course of study, intended for the children of more than four-fifths of the Russian people, included neither history, civics, natural science, nor any form of hand training. It gives an idea of the limitations imposed by the Czarist State upon the things that could be taught in Russian schools.

Teachers under the Czar were subject to constant surveillance by government inspectors. In the state schools this surveillance was complete; in the zemstvo schools and the church schools it was only a little less thoroughgoing. The teachers were wretchedly paid. In the period immediately before the Revolution French teachers received 481 rubles per year; Dutch teachers, 875 rubles; English teachers, 1665 rubles; and Russian teachers, 360 rubles. The year before the war, a survey published in *Russkaya Shkola* showed that a single teacher living in a village required about 536 rubles, while a family man needed 1073 rubles. (M. G. Hindus, *The Russian Peasant and the Revolution*, N. Y., Holt, 1920, p. 57.)

Only a few Russian school children entered the higher schools and colleges. The Universities were practically closed to working-class children.

Among the few students who reached the higher educational institutions, social discipline was rigid. This was due in part to the student disorders which were so com-

mon in Russia during the latter part of the nineteenth century. The British Board of Education Special Report on Russia refers to these students' disorders in some detail. Among other information it gives the rules for students that were issued under the sanction of the Minister of Public Instruction and imposed on the students of all universities:

"13. The presentation of addresses and petitions signed by several persons, the sending of deputations, the exhibition of any notices whatever in the name of the students are forbidden.

"14. Within the buildings, courts, and grounds of the university the organization of students' reading rooms, dining or food clubs, and also of theatrical representations, concerts, balls and other similar public assemblies not having a scientific character is absolutely forbidden.

"15. Students are forbidden to hold any meetings or gatherings for deliberation in common on any matters whatsoever or to deliver public speeches, and they are likewise forbidden to establish any common funds whatsoever.

"16. Students are forbidden to take part in any secret societies or clubs such as *zemliachestvo* and the like, even though these may have no criminal object, or even to join any legally recognized society, without obtaining express permission in each individual case from the authorities of the university concerned." (pp. 445-6.)

Against this coercive university discipline the students revolted time after time. It was aimed to prevent them from thinking. In practice it served to stimulate their interest in a new world order.

Dominated by a ruling class shibboleth that education must be confined to those who were intended to rule, with only a tiny proportion of Russian children attending school, teachers underpaid, harrassed and restricted, students subject to continual surveillance and responding by intermittent revolts—this was the educational system of Czarist Russia. Against the background of this dark educational past flashes the blinding light of the Russian Revolution.

II. THE SOVIET EDUCATIONAL STRUCTURE.

Educational enthusiasm swept across Russia with the Revolution. The people had been kept in ignorance. Only a few of them had been able to dip into the book of knowledge. Now the whole volume was in their hands and they might use it as they would.

Higher institutions were thrown open. Students flocked into them by thousands—students many of whom had grown old without ever having learned to read and write,—students in search of knowledge. In the first enthusiasm of the Revolution great plans were made. At a Pan-Russian congress on education held in Moscow during August, 1918, Lunacharsky, Krupskaya and others painted, with broad strokes, the intellectual and esthetic life of the new Republic.

But means were lacking. Financial bankruptcy, civil war, famine, economic disorganization all took their toll during those three critical years that followed 1918. In 1921 the Soviet Union turned the corner economically. From that time forward the economic foundation has been laid for the new educational system.

Since the days immediately following the Revolution, Russian educators have been striving to utilize the educational machinery to prepare the people for their own emancipation. Their first effort was to make it possible for all to have an education. For this purpose they aimed to establish "a single absolutely secular school" that would be thrown open to the humble and the poor. (Theresa Bach, *Educational Changes in Russia*, U. S. Bur. of Education, Bul. 37, 1919, p. 3.)

When H. N. Brailsford made his study of the Soviet state in 1920 he came to the conclusion that the Soviet authorities were trying to "base the greatness of the world's first Socialist Republic upon a generation of chil-

dren who will be mentally and physically the superiors of the men and women of to-day." (*The Russian Workers' Republic*, London, Allen & Unwin, 1921, p. 76.)

One of the first acts of the Provisional Government of 1917 was the secularizing of church schools. "The final blow inflicted on the ecclesiastical school authorities came from the Soviet of the People's Commissaries, which in its session of January 20, 1918, officially proclaimed the separation of church and school. The immediate effect of that measure was the elimination of the teaching of religion and theology in all the public schools and the doing away with all discrimination between pupils on religious grounds." (Theresa Bach, *supra*, pp. 5-6.)

Control over Soviet education is now localized in each of the republics that compose the Soviet Union. In this respect the organization of affairs in the Soviet Union follows the line laid down in the organization of the Government of the United States. Matters of local concern are handled locally, leaving only matters of general concern to be dealt with by the central authorities. In the Soviet Union education is one of the questions that is left to the local authorities.

Each republic has its department of education. Each city likewise has its educational department. Education is organized by counties, by regions and by districts. The important political areas all have their educational functions.

All educational matters that are of purely local concern are decided locally. Following out this principle of local self-determination the schools in the Ukraine are now requiring all of their pupils to learn the Ukrainian language. Schools in Tiflis are conducted in Armenian, Turkish, Russian and Georgian because of the large populations that speak only one of these languages. Local interests therefore determine the general character of local educational functions.

This does not mean that there is no common aim in the Soviet schools. Behind them is the unified structure of a

workers' and peasants' government. Congresses and conferences are being continually held. Various economic and political organizations such as the Trade Unions and the Communist Party, that are Union-wide in their scope, bind the whole educational structure together. It remains true, however, that there is no coercive central control of education in the Soviet Union.

Education is somewhat centralized within each of the republics. The four "big republics" of which the Soviet Union is composed are the Russian Republic, the Ukraine, White Russia and Transcaucasia. An idea of their relative importance may be gained from the following figures:

STATISTICS OF COMMON SCHOOL EDUCATION FOR THE
SCHOOL YEAR 1924-5

	Establishments	Attendance
Elementary schools	86,701	7,077,410
7-year-course schools	3,821	1,313,382
9-year-course schools	781	450,541
Secondary schools	1,047	276,726
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Total	92,350	9,118,059

In addition there were 3,338 kindergartens with 257,715 pupils, 1,164 combined kindergartens and creches with 61,450 children, 264 settlements for normal children with 46,735 children, and 540 settlements and institutions for defectives with 33,826 children.

On January 1, 1925, there were 3,030 vocational schools with 283,506 students, 114 workers' colleges with 43,109 students, 903 establishments for technical education with 162,197 students, 170 colleges of higher education with 170,811 students.

Within each republic the school work is organized, just as it is in other countries, under a secretary (commissar) of education, and an educational department. The chief subdivisions of the Department of Education of the Russian Republic are:

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Within each republic the school work is organized, just as it is in other countries, under a secretary (commissar) of education, and an educational department. The chief subdivisions of the Department of Education of the Russian Republic are:

1. A department of organization and administration.
2. A central department for social education.
3. A general department for professional education.
4. A chief committee on political education, including in its membership representatives from the trade unions, the Communist Party, the co-operatives, etc. (It should be noted that many of the subdivisions of the educational department have representatives of other organizations and departments on their committees.)
5. A chief department of scientific institutions, with sub-divisions on scientific institutions and on museums.
6. A chief department for the inspection of literature and editorship.
7. The scientific state council, with
 - a. A section on scientific pedagogy.
 - b. A section on scientific technology.
 - c. A scientific political section.
 - d. A scientific arts section.

This is the central planning department for the educational work of the Republic.

8. Three economic undertakings are now being carried on under the direction of the department of education:
 - a. Gosisdatt—the state publishing house.
 - b. Goskino—the state moving picture enterprise.
 - c. The department of state theatres.

Directly or indirectly this organization touches all of the educational work that is going on in the Republic. Where it does not have mandatory authority, it acts in an advisory capacity. It is the state, organized as educator.

This is an outline of the educational organization for the entire Russian Republic. Within the Republic, each subdivision—each region, county, city and village—has some form of local educational organization with a greater or less amount of local autonomy. Moscow, with its population of two millions, has a very extensive school system. Leningrad also has a large educational plant. Both cities are in the Russian Republic, and yet the educational work

done in the two cities is in many respects quite different. The principle of working class education remains the same. The local practice varies.

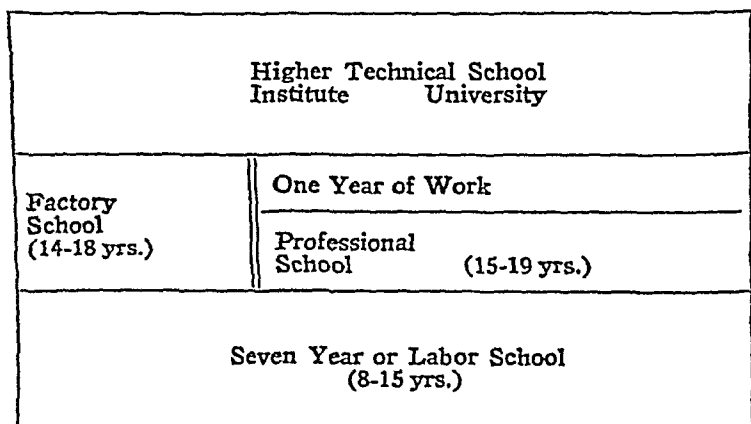
There is nothing new nor unusual in this form of central and local educational administrative organization. It exists in many countries. Soviet educators are making their contribution in the work that is being done in the schools.

Soviet educational authorities have a dual problem: they must educate the new generation of children; they must also educate the adults who, under Czarism, missed an opportunity to attend school. Both problems are insistent. The educational authorities of the Russian Republic link them in this way:

Higher Schools			Communist Universities	
Technical Schools (Colleges)			Workers' Faculties (Rabfacs) (Adults)	School of Politics (for Adults)
School for Young Peasants (15-18 yrs.)	Factory School (14-18 yrs.)	Professional School (15-19 yrs.)		School of Political Education (for Adults)
Elementary School—Labor School (8-15 yrs.)				School for Illiterates (Adults)

Ukrainian educational authorities modify this scheme in two important ways: First, they make a break of one working year between the professional and the technical schools. Second, they concentrate all of their attention on

technical work and higher scientific work, thus practically eliminating the university. Their scheme for child education, as outlined to me by two of the leading men in their school system, is as follows:



Education of the adult population, whether in forms of political education or in the rabfacs, is regarded as of only temporary importance. With the coming of a generation of educated children the regular educational system as outlined above will do this work.

Looked at from one point of view these general outlines mean little. They do not represent accomplishment but only striving. They indicate, not what the Soviet educational authorities have done, but what they hope to do. And it goes without saying that in the Soviet Union, as elsewhere, accomplishment usually lags behind programs. Still they give a picture of the educational trend.

There are a number of terms employed by Soviet educators that are not commonly used in American educational literature. Some of these terms have quite different values in various parts of the Soviet Union at the present time. For the sake of clarity, it is therefore necessary to define the terms that must be used in describing Soviet education:

Pre-school education refers to educational work with children between the ages of three and eight. Children of less than three years are under the boards of health. Children of eight come under the compulsory education law. Pre-school education includes kindergartens, nurseries, playgrounds, story telling, trips and excursions, the preparation of literature for young children.

Mass education is the education that all children are supposed to have. It includes ages from eight to eighteen or nineteen. All children in the Soviet Union will ultimately go to school during these years. For the present the lack of buildings and of equipment make general compulsory education impossible.

Labor schools are the schools that take children from eight to fifteen years. They are also called Seven Year Schools. The work that they do is described as Social Education. They are the elementary schools of the Soviet Union.

Social education refers to the work with children between eight and fifteen years. This is the education given by the Labor Schools or Seven Year Schools.

Professional education is the specialized training given to students between the ages of fifteen and eighteen or nineteen. Professional schools are very much like American technical high schools, except that they are somewhat more specialized. They include Factory Schools. Professional Education is intended to train disciplined, efficient workers. According to the Soviet educational plan, all workers will complete a course of training in a Professional School.

Factory schools are run in connection with some industrial enterprise. The students usually include all of the apprentices at work in the enterprise. Students are from fourteen or fifteen to eighteen or nineteen years of age. They spend four hours of each day in the school and four in the factory.

Higher technical schools are those institutions of American college grade that take students at about

elementary schools, two secondary schools, people's houses, village libraries, and a teacher's training centre, all located in villages near Moscow. The whole plant is under the direction of Stanislav Schatsky, a member of the State Council of Education.

Mrs. Schlager still directs the work of the Moscow kindergarten connected with this experimental plant. During the past two years she has been organizing a series of branch kindergartens and playrooms in the large apartment houses of her neighborhood. Her plan is to have a small playground in the yard of each apartment house, and to have one or two rooms in each apartment house set aside for educational work with small children. These rooms will have a simple equipment and will afford recreational opportunities to the young children of that house. Thus each group of living quarters would have a place where pre-school work could be carried on by trained teachers and nurses.

The plan also includes the organization of the mothers connected with each of these kindergartens, so that the pre-school work will not only free a portion of the mothers from the necessity of taking care of their small children all day, but it will be a centre for the community education of parents.

The central, or parent kindergarten, with its very complete equipment would be used at some time during the day by the children from all of these kindergarten "primitives" as Mrs. Schlager calls them. Instead of 65 children using this central kindergarten, as they do at present, the new plan would make it available for about 300 children in the course of a day.

Coupled with this move for organized kindergarten work there is an active campaign for neighborhood playgrounds. I visited some of these playgrounds in Moscow. They were equipped very much like playgrounds in the United States. All are under the supervision of the educational authorities, and they are designed primarily for the use of small children.

The largest kindergarten plan that I saw in the Soviet Union was that of the Trekhgornaia Textile Factory in Moscow. It consisted of nine separate units, all under the general direction of the culture sub-section of the workers' factory committee. About 450 children were accommodated in these nine plants.

Each of the kindergartens was organized in a former private house. The money for their support came from the "culture fund" provided by the factory administration for the use of the factory committee. The educational side of the work was supervised by the department of education. Three interests were therefore represented in these kindergartens: the interests of the workers who elect the factory committee; the interests of the factory that provides the funds; the interests of the educational authorities that provide educational direction.

This factory is a state enterprise—a part of the state textile industry. Like every factory (or other employer) in the Soviet Union, the administration at Trekhgornaia signs a collective agreement with its workers. Among the most important provisions of this agreement are the clauses providing that certain funds shall be paid from the receipts of the factory to cover the costs of cultural activities among the workers. Thus while the factory provides the money for this cultural work, the factory committee, on behalf of the workers, directs its expenditure.

These nine kindergartens accommodated only the children of persons who worked in the Trekhgornaia factory. They were open from eight in the morning till six at night, so that working mothers could have their small children taken care of during their entire working day (eight hours).

Kindergarten work was carried on as in other well equipped kindergartens. Each plant had its outdoor as well as its indoor play place. There were excellently equipped classrooms with from 20 to 25 children in a class. Each child had an individual towel, hung on an

There are other aspects of pre-school work that are being planned and tried out: singing and music; excursions to museums and other points of interest; storytelling; children's departments in libraries; hand-work; periods of sojourn in the country. Much of this work is being organized by a commission on extra-mural education, working under the Russian State Council of Education. Similar activities are being carried on in the Ukraine.

The purpose of these efforts is to fill the period from three to eight years. The educational authorities hope to provide: a good diet; rest and normal recreation; glimpses of art; trips into the various fields of nature; contact with music and drama; a knowledge of the practical, work-a-day world, and the more familiar social institutions of the society in which the child is growing up. All of this knowledge is to come to the child through the five senses, without taxing the reason. Manual work, esthetic work, visual work, an opportunity for observation and for association are relied upon to give a superficial idea of the world that will be studied in detail when the child enters the school.

IV. SOCIAL EDUCATION—THE LABOR SCHOOL.

Soviet elementary education is called social education. It is carried on in the labor school. The labor school is the first division of the mass school—the first section of the Soviet school system. All children in the Soviet Union are required to go through the labor school.

Social education is divided into two parts. Children enter the labor school at eight, and complete the first part of the school at twelve years of age. The second part of the labor school extends to fifteen years of age in some schools and to seventeen in others. There is a difference of opinion among Soviet educators as to whether children are ready for specialized (professional) education at 15 years of age, or whether they should continue general education until they are seventeen. Hence the difference in the number of years spent by children in the second part of the labor school.

Most social education is carried on in the villages. Only about one-ninth of the elementary school buildings are located in the cities. In January, 1924, the total number of schools in the Soviet Union is given as 92,857. Of these, 81,306, or 87.5 per cent. were in the villages. The city schools were larger, of course, but the village schools far more numerous.

The ordinary village school in the Soviet Union is as badly equipped for educational work as was the average village school in rural United States toward the end of the last century. Village communities are largely illiterate. Children of school age are always wanted to run some errand or to do some chore. These home demands come first, and school duties take second place. During the harvest time it is practically impossible to keep the village children in school.

Conditions in the ordinary Soviet village are still

individual peg, and marked by a picture, or some other design, drawn by the child to designate his property. The children were also well provided with handkerchiefs.

The kindergarten served three meals per day: a breakfast consisting of tea and bread and butter (the usual Russian breakfast); a two course dinner at noon—a meat soup, meat and one or two vegetables, with bread; a tea at four o'clock, consisting of bread, with butter and tea, and some preserved fruit. (Milk is scarce in Moscow. Children do not get it ordinarily.) After the noon dinner, the children took a two hour nap. The beds were ranged in sleeping rooms, where the children had individual cots, marked as the towels had been.

These kindergartens were operated six days per week. The cost to the parents, including the meals, was two rubles per child per month. This fee was, of course, quite nominal. A ruble is about 52 cents.

The object of this kindergarten work was to provide a normal play space, a good diet, an opportunity for rest, a chance for association, and freedom for mothers of young children. One member of the factory committee, who had this work in charge, showed me the day-nursery and the kindergartens connected with the factory, explained the purpose of the work, and then apologized for the meagreness of what was being done.

"We have had no chance to get things really going," he said. "We have not been able to build any new buildings suited to these purposes, nor even to make the needed improvements on the old buildings that we are compelled to use. We suffer with the rest of Moscow from a building shortage. We are hampered by this lack of space and also by a lack of knowledge as to how these things can best be done. We are compelled to feel our way and to learn as we go."

This was the most ambitious and extensive kindergarten plant that I saw in the Soviet Union. Many other factories had smaller plants. The movement for day-nurseries, kindergartens and play-grounds under the di-

rection of factory committees is developing rapidly, and the support of such institutions is commonly regarded as a legitimate charge against the receipts of an industry. The general theory underlying this practice is that each industry should provide for its own workers. That provision does not stop with wages, as it does in the United States, but it extends to education, housing, food, and many other items.

Another aspect of pre-school education is the development of a new children's literature. The Russian children, like the children of every other country, have had a literature built upon folk-lore, upon the doings of fairies, princes and knights. Most of this material is quite unrelated to the present age, and a great deal of it laughably false and silly. Still, in the western countries it is printed and re-printed because it pays. Educators in the Soviet Union have started a movement to build a literature for children that is grounded in reality, and that will stand the test of science as well as that of art.

Under the Scientific Pedagogical Section of the Russian State Council of Education there is a commission on children's literature. This commission has, among its members, writers of children's literature, experts on psychology and pedagogy, and representatives of the publishing houses that handle the publication of literature for children. A survey has been made of the entire field of children's literature, and an effort is now being made to provide a literature that is at the same time interesting and instructive. I saw some of the books that had been turned out under the direction of this commission. The art work (drawing and color) in many of them was of a very high order. The educational material was not so good. It is difficult to create a body of child literature that has sufficient dramatic appeal and that is at the same time modern in its point of view, and written with a scientific background. The attempt is as ambitious as it is novel, and it is being made with as much enthusiasm as are the other experiments under the departments of education.

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largely against successful school work. Still, I visited some village schools that were beginning to handle the new course of study for elementary schools with excellent results.

One teacher in a two-room village school has been in the educational system since 1916. Until 1923 she had used the old Russian system.

"The old system was very easy," she explained. "We just taught reading and writing and a little arithmetic. The class recited in unison. All the teacher had to do was to open the book at the proper page and start the class going. It was just like a machine."

Then she spoke about the new system. It was very different, she said. There was almost no book work connected with it at first. The children were expected to study their homes, the street they lived on, the village, its government and its sanitation. They examined all of the wells and looked up the matter of water impurities. The new education is just a matter of observation and comparison. There is no more book-lesson work, and no more recitation in unison.

"The teacher has to prepare the lesson each day. The pupils are consulted about what shall be done next. The teacher must think the lessons out, step by step. It is particularly hard for us because we are not prepared or trained to do such work. Most teachers are even afraid to try it. I was afraid at first, but since I have started it I like it much better than the old system. It gives the teacher a chance to do some original work. The children get a great deal more also. They have an opportunity to grow."

She then went on to explain that the older children were making a sanitary inspection of the village during that week. It had occasioned much comment and not a little discomfort, because some of the villagers were emptying refuse into a stream where other villagers were compelled to wash their clothes. Of course the children had

no authority, but their inspection had caused a great deal of discussion-provoking publicity.

Education in this village, a thousand miles from Moscow, was still very backward. The new ideas were penetrating, however.

Another village four-room school had a "model" class in one of the rooms. This model class was organized on the new Soviet plan. It was a beginners' class, and there were no books. Instead the children had begun the school work in late September by making collections of leaves, seeds and other products of autumn. These collections were made outside of school hours, brought into the school, arranged and discussed. Names were given to all of the seeds, leaves and flowers. The opening of school, for this class, had consisted of a month's study of botany and climatology.

The children had also made models of fall activity. There were hay-cocks, straw-stacks, barns. One small boy had modeled a team of oxen in clay. It was his first effort; the work was very crude, but there was a fine swing in the bodies and legs of the animals.

These children had never been in a kindergarten. They were in school for the first time at eight years of age. Instead of beginning with books, they had begun with life—the life of the village in autumn. They were observing it, analyzing it, discussing it. The teacher read something about it from books. The children were not so far along. So they used the autumn for their books, studied it with great enthusiasm and in a month they had learned a great deal about the things that were happening all about them.

The head teacher in this school was a man of perhaps twenty-four. He had taken a special course in the "new system" and was working out the details for the first time with his class. He liked it. The children were enthusiastic about it.

He showed me the meagre equipment and the simple,

home-made devices for carrying on the work. "We are very poor here," he said. "When school opened the teachers and the older children scrubbed the place out, and we have been trying to paint it and do some repairing. The village is just recovering from the war and the famine. But a great many people here are interested in seeing some real educational work done, and we are going to succeed."

This village too was remote from the centres of population. Yet the new education was being organized there. The children had a tiny co-operative, where they bought their own ink, paper and pencils. Each class was organized, with its class committee and class officers. Two years before this region had been devastated by civil war. Already, however, new schools were growing up from the ruins which the war had left.

These were typical village schools, with old, inadequate equipment, with teachers who were groping about for ways to put the new educational system into effect. They had not yet felt the impact of the new order. Some villages were worse than this, and some were much better. Educationally most villages are still backward.

Some day, if plans materialize, all village children will have seven years of general (social) education, and three or four years of education in professional schools devoted to training workers for the principal occupations carried on in the village. At the moment, this time is still well in the future.

Most Soviet village schools have made comparatively little progress. They serve the most backward part of the population. They will probably be the last to feel the impulse of the new educational movement that is sweeping across the Soviet Union. In order to see this movement in its real proportions, one must go to the industrial centres and to the cities.

City labor schools, or as they are frequently called, seven year schools, are housed very much as elementary schools are housed in the United States. They have build-

ings accommodating several hundred (sometimes more than a thousand) children. The halls are wide and the stairs convenient. Few of the buildings are new. In lighting, ventilation, toilet accommodations and gymnasium facilities they are far behind the best of the elementary schools in the United States. There are a number of features however that are quite distinctive. This is particularly true of the subject-matter used in the earlier grades, of the methods of presenting this subject matter and of the organization of students and school administration. These differences can be best brought out by two or three illustrations.

One day I walked, unannounced, into a public elementary school on the outskirts of Moscow. It was a small school, badly housed in a former private residence. Its physical equipment was distinctly below the Soviet average. The first room that I entered housed the beginners' class of about 35 children.

The teacher of this class welcomed me and explained the work that the class was doing. Her pupils had been in the school for about two months. Few, or none of them, had ever been to kindergarten. They were using the "bookless" method of first year work.

Each child began the year with a note-book. The teacher used some simple word such as dog, and asked the children to put it in their note-books. Of course, they drew it. Next the teacher used a phrase "boy and dog." The children drew pictures of both, and put a dash for the word that they could not picture. In the same way, verbs were introduced and represented by dashes. During the first few weeks their pencil work consisted in making pictorial representations of simple words, phrases and sentences. It was not until the concept of phrases was well fixed in their minds that the children began to do any writing.

When I visited this class the children were learning to build letters into words and phrases. Each exercise was drawn or written by the child in his note-book. The

children were very eager to show their books and to explain their drawings. Each seemed to feel a certain pride of authorship. In some cases this was thoroughly justified as certain of the books were very creditable.

This bookless work, or, as it might also be called "note-book method," was supplemented by a system of trips, excursions and group projects. At the time of my visit the class was busy with a superficial study of "our street." This study consisted in listing all of the objects along the street and then making a class drawing on a roll of paper. Each of the children contributed something to this drawing. The child either drew directly on the paper, or else drew something separately and pasted it on. The result was a picture of the objects along the street as the children had seen them. The work was progressing finely, and the children seemed to take a real pride in it.

All of this activity was in the realm of the concrete. Most children of seven or eight are quite ready to draw objects that are called to their attention. They do not write because writing involves the use of symbols which are quite beyond the grasp of many young children. These children were beginning their school work with drawing, and going to the more abstract letters only as they were able to make the connection in their minds between concrete objects and abstract ideas.

The class project—in this case the members of the class all working together on a picture of the street—plays a very important role in all Soviet education. These children were all living on or near this street. They traveled it each day. What better method of social education than to ask them all, as a group, to observe the street along which they were walking, and then all join together to make a picture of its various parts?

Other classes in the same school were following out the same method. One older group that had made a trip to a factory was preparing a class report on the factory, with text and illustrations. The class was divided into small

groups, each one of which was responsible for some one phase of the factory work.

The system used in this beginners' class is little more than an extension of the ordinary kindergarten method, with the concept of the class project added. Even that idea pervades kindergarten games. The children in this class took a great share in planning the course, and each day one of them dictated to the teacher a record of the work accomplished by the class during that day.

The woman in charge of this beginners' class had been teaching in Moscow schools for twenty years. The bookless class project system had been used in her class for only two years. I talked to her at length about her experience with the two systems.

"This new method is far harder on the teacher," she said. "Under the old system things moved along easily. You took the book, opened it at the first page and started. When you were through with page one, you went to page two. Every day was much like the last, except that you were on a different page. The bookless system makes each day a new problem. It has many possibilities. Before we finish with one problem, we talk things over with the children and decide what is to be done next. Of course the class outline gives the general direction, but the details are settled by class and teacher together.

"When a decision is made we must find ways of putting it into effect. If the children decide, for example, to make a class drawing, we must find a way to buy paper, crayons and paints. If they decide on a trip or an excursion, we must find car-fare. The number of possibilities is large and it is sometimes a real problem to come to an agreement. The teacher under such a system cannot keep ahead of the class. She must stay with it. We go on together with the children, and keep a record of our voyage."

Another teacher in the same school, who had also taught under the old regime, told a bitter story of hardship dur-

ing the war and the Revolution,—small salaries, often unpaid for long periods of time; lack of fuel; shortage of supplies. Still, she said, the new way was better. "The children get twice as much out of this as they did out of the other. They feel that they are a part of the school. Go into any of our classes, and you will find an interest and an enthusiasm that the old system never aroused."

This book-less method would not be so impressive if it were being tried out in a dozen or even in a hundred Soviet first grade classes. It can be found in experimental schools and in some of the best private schools all over the world. But thousands of Soviet first grade teachers are experimenting with some variant of this method at the present moment. It is one of the ways in which Soviet school authorities are trying to introduce children to the schools and to the community in which they live.

This little Moscow school was physically worse than average, though it was in the Soviet capital. Now look at another school, with an equipment better than average, but located in the coal fields of central Russia, in the city of Stalinov.

Stalinov is a city of about 40,000 people who are engaged in mining, steel and machine manufacturing and railroading. Since 1923 the First City School (elementary) has been working on the new system. There are eighteen classes in this school, ranging from a first class with children of eight years to a seventh class, with children of about fifteen years.

Children in the early grades follow much the same system as that which is in use in the Moscow school just described. They work upon simple unit topics and carry out class projects. The work is planned from week to week by teachers and pupils, following the general line of the course of study. Each class keeps its record of daily progress.

All of the older children in the school were working in class-rooms organized on the laboratory plan. Each room was devoted to one subject,—mathematics, social

science, biology,—and when the children wanted to do class work in one of these subjects, they went to the proper laboratory. They did their work in class groups, however, and not individually, as under the Dalton plan.

The laboratories were equipped with maps, charts, books of reference. Many of the charts had been made by the students. In each laboratory there were several tables around which the students were gathered—four, five or six at a table. They were all working in groups. On entering the room you looked in vain for the teacher in a commanding position, sitting behind a desk at the top of the room. Instead you found her at one of the tables, working with that group. The students at the other tables were going on, meanwhile, with their activities. The laboratories gave the impression of reading or reference rooms in some large city library. There was no sense of school “discipline.” Each of the persons in the room was going about his business as if he really meant it.

The Principal at this First City School was a middle-aged woman who had spent her entire working life in the Russian schools. “We are trying to relate the work of the school to the life of the city,” she explained. “We no longer teach subjects, such as arithmetic, spelling, geography. That type of specialization has been given up. The students in each class work on problems—one problem at a time. The problem is taken out of the life of the community. The younger the children, the more local and concrete and simple the problem. The children visit the institutions they are studying, analyze them, explain them and, where possible, suggest ways for improving them.”

I asked for more detail about the course of study. The first topics taken up related to the homes and families of the children. The children told the names of their parents, their occupations, the work that went on in the home, the method of organizing the home, the relation between their family and the other families in the neighborhood. The life of the home and the neighborhood was thus carefully reviewed, and its social meaning was discussed. Sugges-

tions were also made as to the possibility of reorganizing the life of the neighborhood on a more workable basis. Second year students went on to the life of the city (or town). In the third year the country or district was the topic. In the fourth year the subject was the province. The fifth year group took up the Soviet Union. Following that came a study of the commercial and economic relations of the chief countries of the world.

During the first four years, this method went very well. One group of children, working with one teacher, could make a study of the local institutions with comparative ease. When, however, it came to the work of the higher years, the field to be covered was so much greater and the questions that arose were so technical that no one teacher could hope to answer them all. As a matter of necessity, therefore, after about the fourth year the work was divided among the laboratories. Each of the upper grade teachers therefore handled a laboratory and a specialty. That did not mean a redivision of subjects on the old basis. The teachers specialized. The classes continued work on their own unit problems.

This is one of the points of controversy in the Soviet schools. The "complex system," or unit problem system, succeeds very well for the first three or four years. The children like it and the teachers are able to handle it effectively. Then some form of specialization becomes necessary because of the intricate nature of the problems that have to be handled. The old method was to let the child specialize—geometry, ancient history, physical geography, mechanical drawing. The aim of the Soviet school authorities is to keep the classes at work on unit problems, but under the direction of a number of teachers who are specialists in particular fields.

I talked over this question with many of the Soviet educators. Stanislav Shatsky, Director of the First Experiment Station of the Russian Republic, has reached the conclusion that some form of group project, applied to life in the country, is the solution. A part of his experi-

mental work is carried on in Moscow, and another part in the villages in the immediate neighborhood of Moscow. He has been trying to find an answer to this particular educational problem, and he is practically convinced that it involves the education of the old elementary students in an environment where they can carry to completion projects that pertain to the maintenance of life—the provision of food, clothing and shelter.

Such a school system would be very expensive. Shatsky believes that a school of this type could be made about thirty per cent self-supporting. It would mean that city children from twelve to sixteen would receive a considerable portion of their education in the country.

Other educators said frankly that they had found no answer to the problem. At the moment this is one of the gaps in the Soviet plan. The educational leaders know this and are doing their best to find a way out of the difficulty.

The students in the First City School were organized. Each class had a class committee of three members, one of whom was the class secretary. The class secretary was also the representative of his class on the school committee of eighteen.

The school committee of eighteen (one representative from each class) elected a president, a secretary, a chairman of the sanitary committee, a chairman of the sports committee, and a committee of three to carry on the cultural work of the school.

The school committee was in general charge of all matters concerning student activities. Together with the class committees they handled all cases of discipline.

There was no evidence of an effort on the part of the teachers to regulate the conduct of children in the class rooms or in the halls or other parts of the school. That task seemed to be entirely in student hands. This does not mean that there was disorder in the school. On the contrary, the children in the halls and elsewhere went about their affairs in a quiet business-like way. There

was some noise when classes were changing rooms, but during the class periods the school was very quiet. All breaches of school discipline were referred at once to the proper student committee.

The Student President of the school was a tall, energetic boy of fifteen. I talked with him at some length about the problems of student organization. "What is your chief difficulty in handling this job?" I asked him.

"Discipline," he answered promptly. "We have no trouble with club work and the like. They almost take care of themselves. But discipline takes a lot of thought and time. Each class is supposed to handle its own discipline as far as it can. When a matter gets beyond the class, it comes before our school executive."

"What happens then?"

"We settle it amicably if we can. If that is impossible, the executive holds a trial and reaches a decision. The whole eighteen participate in such a trial."

"Is their decision final?" I asked.

"No, not final. Any decision they reach comes before the school committee for review."

"Who is on the school committee?"

"There are four members—the principal, the assistant principal, a representative of the workers in the school (clerks, janitors) and the president of the student body."

"So you, as president of the student executive, have a chance to present the case of the student organization before the school committee?" I inquired.

"Of course," said he.

"Are you usually upheld?"

"Yes, usually. We try to make decisions that are within reason."

"Does the school committee have anything else to do except to review your decisions?" was my next question.

"Surely," he answered. "It plans and directs all of the work of the school."

"And you, a student, sit as a member of that committee?"

"Of course. We are going to school here. Is not the school organized for the students?"

I changed the line of my questions. "Does not this work take a great deal of your school time?"

"Not so much," was his answer. "We divide the work among us, and the members of the student committee help each other out. Then you must remember that we learn a lot by this sort of thing."

I met President Forer for this interview in the students' room. It was a small, well-kept social room under student control. Its care fell to the committee on student club work. There was a business-like air about the room that gave the impression that someone was taking an interest.

As for the student sub-committees, the Sanitary Committee was responsible for seeing that buildings and grounds were kept in a sanitary and orderly condition. The Sports Committee was responsible for school sports and recreation. The students had a clubroom, a wall-newspaper, and a reading-room, all of which came under the control of the Club and Culture Committee.

Among the students of this school, 6 per cent were Young Communists and 28 per cent were Pioneers. These forms of student organization are classed in the Soviet Union as "political." They are encouraged among the students, but they cannot be directed by teachers. The Pioneers in this school were under the direction of a Young Communist, who was a student in a local college. In the United States he would be called a scout master.

This Pioneer group was well organized and very active. "What is a Pioneer?" I asked one of the older boys. He replied:

"A pioneer is a student whose business it is to build a new world."

Ten miles away, in another steel town (Dimitrievsk) I visited a school of about the same size, in which there was a threatened epidemic of scarlatina. There I had a chance to see a very complete school-health system at work.

Special emphasis was laid in this school on the outlining of the course of study. The students took part in making the outline. When it was completed, it was posted in each room—a small book containing an outline of the work for the next few weeks. The copies in the various rooms seemed to have been thoroughly used.

Here, as in other Soviet elementary classes, the course centered about the home, the town, the region, and the activities that were going on there. In the upper years of this school there were laboratories, one for each major body of material.

"Is this the Dalton Plan?" I asked the principal.

"No," he answered, "we have abandoned the Dalton Plan. It produced too much individualism by setting up each student to do his own task. We want the students to learn group work. That is what they will be called on to practice when they get out into the world."

Students who finished this school, at about fifteen years of age, were supposed to understand the home, the family, the neighborhood, the town, the district, the Soviet Union, economic and political relations, and the chief current events of the world. This was the social side of their education.

"That is one of the greatest differences between the old school and the new," the Principal told me. "I have spent my whole life in the schools of this town, and I know both systems well. Under the old system we dared not talk politics. Under the present system every child is supposed to have a thorough knowledge of the world he lives in, with all of its economic, political and social relations."

The school was still in an experimental stage. "We are working the whole problem out as best we can," one of the teachers explained. "We are not sure of anything as yet, except that we are getting better results under the present plan than we ever got under the old."

Soviet students sing a great deal. There was a girls' choir in the Dimitriersk school that did very fine work.

The students in this school were thoroughly organized

as they were at Stalinov. They were responsible for discipline, and took charge of the various details of the student activities. They were also represented on the school administration committee.

Fifteen per cent of the students at this school were required to pay tuition. All children of workers or peasants came free to the school, but the children of the shopkeepers and other representatives of the business and professional classes paid in proportion to their income. In no case was the amount of tuition large.

At Rostov I visited the Pokrovsky Elementary School with its eleven hundred students. In the higher grades, the classes numbered about 25. The school was in a transition stage between the old system and the laboratory plan for the upper years. Most of the work that I saw was ordinary classroom work, but the method used was the laboratory method. The children worked in groups upon problems that were prepared for a period of three months in advance and posted up in the class rooms.

The sociological laboratory in this school was equipped with statistical and other publications. Some of the books were dated 1925, and had just come from the press of the State Printing House in Moscow. The equipment in this laboratory was not extensive, but it was excellently organized for the use of the students.

Student organization was very thorough in this school. Each class had a class committee of three. The committee kept the record of attendance, was responsible for the class discipline, and, in collaboration with the teacher, initiated the planning of class work.

All members of class committees were members of the student school committee. The total membership of the committee was about 75. The student school committee elected an executive committee of seven which was the responsible body in charge of student affairs. There were sub-committees on sanitation, on economic activities, on sports and on student culture work. There was a school organization of Pioneers. It had been recently organized, and had about fifty members.

This school, with its educational activities was in the hands of a school committee, made up as follows:

Teachers	37
Students (one from each group or class) .	25
Parents' organization	3
From city council.....	1
Workers in school.....	1
Pioneers in school.....	1
Young Communists	1
Central Labor Union.....	1
Large factory near school.....	1
School Principal	1
<hr/>	
Total	72

This school committee met once a month. For working efficiency it was divided into two sections, one dealing with the work of the first four years, and the other dealing with the work of the last three years.

Executive direction of the school was in the hands of a school executive committee consisting of the principal, the assistant principal, the secretary of the teaching staff, the president of the student body and one representative of the parents. This principle of representation and administration was preserved throughout the Soviet Union. In all of the schools that I visited there was a general and rather numerous school committee meeting occasionally and a small executive committee meeting frequently. The school teaching staff always predominated in the latter organization.

One of the Moscow elementary schools, the Edison School (named "Edison" because it specialized in electricity during the eighth and ninth years) had only 35 per cent of its pupils on the free list. The others paid from 50 kopecks (25 cents) to 14 rubles a month, according to the income of the parents. The school was located in a district where many shop-keepers and professional people lived. All children from this social group are expected to pay tuition.

The complex method was used in only the first three years of the Edison School. Then the laboratory plan was substituted. It had been tried out for some time in chemistry and physics. This year, for the first time, it was introduced into sociology, mathematics and literature classes.

I had a talk with the professor of chemistry about the workings of the Dalton Plan. He shook his head doubtfully. "Perhaps," said he, "if you could reduce the classes to half their number it would be possible to proceed on a basis where each child or group of children is working on an individual problem. But that would mean doubling our laboratory space, and we have no extra room." He was keen and eager, but he did not see the new scheme as a practicable one with his large classes.

Student organization in the school was very thorough. Each class had its class committee and the school had a general student committee and an executive committee. The student president, Alexander Charitonov, was a boy of fifteen from the seventh year class. No girl, he said, had ever been elected to the office of student president, although they were members of the executive committee. He gave a very good account of the student activities in the school. As elsewhere the student executive committee had its chief difficulty with discipline. "But," said he, "thus far we have succeeded in handling all cases of discipline that have come up this year. Not once have we been forced to appeal to the faculty."

The general school committee of this school consisted of all the teachers (about 50); the school doctor; a representative of the district Communist party organization; a representative of the technical workers (janitors, clerks, etc.) of the school; 12 students (three from each of the four upper classes; and 15 representatives of the parents. (This is the only instance I found where the number of parents on the school committee was larger than that of the students.) This school committee met about once a month.

School administration was carried on by a school executive committee consisting of: the director, the assistant director, two teachers, one representative of the students and one representative of the parents.

I might cite many more instances of schools which, with minor variations, follow along these same general lines, experimenting with subject matter that will relate the children most thoroughly to the lives they have to live; experimenting with methods of handling this subject matter that would permit the students to take part in its selection, and that would give them a chance to do their work in groups; experimenting with methods of student organization; experimenting with the governing committees of schools. No two of the elementary schools that I saw were exactly alike, and yet all of them were working at the same problems, and in every one of them I found that teachers and children were enjoying the work of rounding out a new educational system.

Readers familiar with the work that is being done in the best experimental schools of Germany, Switzerland, England and the United States will exclaim that there is little of novelty in any of this; that each one of these experiments can be found somewhere outside the Soviet Republic. Probably this is true, but elsewhere these experiments are being carried on in a few isolated schools, with specially picked students. Outside the Soviet Union, where are such experiments being made with hundreds of thousands of school children, taken, just as they come, from their neighborhoods?

Every idea that I met with in the Soviet elementary schools (with the possible exception of the forms of student organization and of school governing committees), I have met with in experimental schools elsewhere. But in the Soviet Union the ideas are being tried out on whole populations. From the experimental work that is now being carried on around them, the new Soviet educational system is growing up.

V. PROFESSIONAL SCHOOLS (HIGH SCHOOLS).

Professional schools are the second rung on the Soviet educational ladder. By the time the children finish the elementary school, at fifteen or sixteen, they are expected to pick out the lines of activity that they wish to follow. Then, during the next two or three or four years, they study and work along the line of this profession.

The professional schools are of three main classes: (1) peasant schools, in rural centres and villages, devoted to the chief rural and village occupations; (2) city schools, in industrial centres, taking up the professions that are connected with industry, commerce, transport, education and government; and (3) factory schools, organized in connection with some productive enterprise, and training the apprentices in that enterprise. In January, 1924, there were 317,842 children in the professional schools. The number is greater at the present time, as additional professional schools were opened during 1924 and 1925.

Professional schools in the Soviet Union, with the exception of two or three items, are very similar to the agricultural and technical high schools of the United States. The exceptions are : (1) the practical work that is required of the students during their school course; (2) the work done in the factory schools, and (3) the organization among the students, and the student representation in the governing committees of the schools.

Vladikavkaz, a small city in the North Caucasus, had five professional schools: a school of transport; an industrial school; an agricultural school; a pedagogical school; a music school. Students entered these schools at about fifteen or sixteen, and remained in them four or five years. All were organized on the same general lines.

There were 130 students in the school of transport, taking a four year course. In addition to the regular

academic work in mathematics, history, economics, chemistry, physics, and the like, each student was expected to do two kinds of practical work; during the school term he was assigned part time work in the railroad shops. I saw a number of these students working on car construction. They were doing the work that would be assigned to an apprentice in a machine shop. After the completion of their four years in the school, they were expected to spend two apprentice years in the branch of railroading along which they had been specializing. At the end of this apprenticeship they were supposed to be technically trained for that class of railroad work.

Students in the agricultural school were required to do the same type of academic and of practical work. They spent about eight months of the year in the school, and the three summer months were spent on the farm.

The best equipped professional school that I saw in the Soviet Union was the First Commercial Economic Technical School of Moscow. This school was under the wing of the Moscow Board of Trade, and in addition to the funds which it received from the educational authorities, it was very generously subsidized by that organization. Beside a large and well-equipped building, the school had an exceptionally fine commercial and industrial museum.

Students entered this school at about fifteen, after having completed the labor school. They remained three or four years.

The whole school was organized on the Dalton Plan. In February, 1925, this plan had been introduced in all courses except foreign languages. When I visited the school in the fall of 1925, commercial arithmetic and book-keeping were still taught on the old class-room basis. In the remainder of the school the students were working at tables which seated six or eight. The classes that I visited seemed to be run on a very high level. The teacher was nowhere offensively in evidence. Ordinarily he was working at a table with one of the student groups. Discipline was excellent, but with no evidence of the exercise of authority.

Dalton record methods were used. A very complete card record was kept by students assigned to the task. The work was done in a four week cycle.

Students seemed to be very enthusiastic about the plan. The teachers were far from having the same faith in it, but they were glad to try it out. Certainly if it has any virtue for the Soviet professional schools, it will be demonstrated here. It will never have a more favorable test.

Students in this school were organized in each class, as a student body, in trade unions and politically. Class organization was simple. Each group of students had its representative, and the representatives from the six groups in the freshman class constitute a board responsible for discipline and for the standards of student work. As there were 1100 applicants for admission in the fall of 1925, and as only 222 were accepted, it was comparatively easy to put pressure to bear on individual students to maintain their standards of work. All local cases of discipline or of poor work were supposed to be handled locally by these group and class representatives.

The entire student body was also organized, with an executive committee of seven, an academic committee, a culture committee, and a committee on economic activities. The student body also selected its representatives on the general school committee and on the school executive committee.

Two trade unions had branches in the school: the commercial workers and the food workers. All students belonged in one or the other of these unions, depending on the line of work they were following in the school. Among the 540 students in the school, there were 175 members of the Young Communists.

The spirit in the school seemed to be excellent, and the relations between the faculty members and the student body were intimate and easy. This is one notable feature of all Soviet schools, particularly above the elementary schools. There is little or no formality in the contacts between the faculty and the students. All are very close to a basis of social equality.

Factory schools are professional schools that are directly connected with some productive enterprise. They take children of about 14 or 15—usually the apprentices in the factory—and train them for two, three or four years. The students spend approximately half of their time in the school and half in the factory.

Like the rabfac, the factory school was designed to meet a special need for technical workers. Many of the foreign technicians who were at work in Russian industries left Russia at the outbreak of the war, in 1914. Others, who were native born, sided with the business classes and left after the Revolution. Great numbers of skilled workers were killed during the Civil War, which was fought with particular bitterness in regions that were strongly industrialized. Meanwhile, despite all of these losses, there had been an expansion of Soviet industrial activity in some directions, and a revival in others, with a corresponding demand for skilled people. How was this demand to be met? The ordinary processes of education were too slow, so the Soviet authorities took two short-cuts: on the one hand they sent workers directly from the factories into the rabfacs for specialized technical training; on the other hand they took the boys and girls who were entering industry as apprentices, and gave them a technical training in factory schools.

Soviet factory schools were usually under the joint direction of the educational authorities, the factory committee (of the workers), and the factory administration. The educational authorities worked out the educational principles and the course of study; the factory committee and the factory administration supervised the work of the school, and the factory provided the money for the support of the school. Frequently, the economic and technical experts from the factory taught in the school.

Student bodies in the factory schools generally were limited to the number of apprentices allowed for that particular trade. For example, in a factory school in a Stalinov metal factory, there were 930 students in the

school, and 11,000 workers in the factory. The number of apprentices in this factory was limited to 8 per cent of the total number of workers; but "We are very short of trained people here, and the demand for skilled workers is growing. The factory management has decided, with the consent of the factory committee, representing the workers, how many additional trained persons will probably be needed here in the next three or five years, and on this basis, the number of students in the school has been fixed. The factory administration needs a reserve of trained people, and everyone is agreed that this is the soundest way to get it." This was the explanation given by the director of this Stalinov factory school.

Among the 930 students in this school, only 28 were girls. Ages ranged from 14 to 18. The course was two years for commercial students, three years for students of metallurgy and four years for students of mechanics.

School work consisted of drawing, mathematics, economics and science. Four hours of each day were spent in the school and four hours in the factory. Class work was carried on in the old-fashioned way. The laboratory method of teaching academic work had not yet penetrated this school.

During the year 1925 students were accepted only on the provision that they had completed four years of the elementary schools. During the previous year there were no academic standards of admission. If the present plan is carried out the requirement for the next year will be five years in the elementary school. The standard will be raised one year for each year that the school runs. In the course of two more years, therefore, no apprentice can be accepted in this factory who has not completed the equivalent of the whole seven years of the elementary school. Thus a definite academic standard is being placed behind industrial work.

Nearby, in a smaller industrial town, I visited a mine school. It was operated on the same principle as a factory school, except that the students, all boys, were pre-

paring for work in a mine, instead of in a factory. (Incidentally, so far as I remember, this is the only school that I saw in the Soviet Union that was not co-educational.)

An old machine shop, connected with a mine that had been destroyed during the Civil War and never reopened, had been rebuilt, in part. Some of the machinery had been rehabilitated; the teacher and the students had made a planing machine for their wood-shop and a foot-power hammer for their forge-shop. The machine shop was well equipped with made-over machines.

Students spent three years in this school. During the first year they worked four hours a day in the shops and four hours in the class rooms. During the next two years, they spent four hours a day in the mines, and four hours in the class rooms. The shop work consisted, for the most part, in making iron and wood equipment needed about the mine. There were few "exercises." The whole plant was conducted on an extremely practical basis.

Miners' sons have first choice when there are any openings at this school. The mine provided for the entire upkeep of the school as a means of getting the necessary number of skilled men ready for mine work.

The school director laughed about his home-made equipment. "The whole place was tumbling down," he said. "We took it over and did what we could with it. It was that or nothing. Thus far our standards are low. We merely require the students to read and write and do simple arithmetic, but before we get through with them, they have a pretty good elementary knowledge of social and natural science, beside their practical knowledge of mine and machine technique.

"Year by year we are raising these standards," he went on. "It will be only a few years until every man who enters this mine will be technically trained before he goes to work, and will be at the same time well enough educated to be a very useful citizen."

Far more highly developed was the factory school connected with the Red October Candy Factory in Moscow.

The proportion of student body to workers was much smaller—four per cent of the total number of workers, and the limit was rigidly maintained.

This factory school was organized in three departments: technology, mathematics and social science. There were six groups of students in the school when I visited it. Each group elected a group bureau of three students which was responsible for: the discipline of the group; the care of the apparatus and materials used by the group; and for the preparation of materials and apparatus for the coming lesson of the group.

The student-group organization was established to facilitate the work of both students and teachers. It familiarized the students with the materials and apparatus that the group was using, and it relieved the teachers of many of the details of laboratory work. This was important as a part of the teaching staff of the school was drawn from the research department of the factory.

When students went into the factory for their four hours per day of factory work, they were directly under the control of a foreman whose business it was to see that the work of the apprentices was carried out according to their educational program. I went through the factory with this educational foreman. He was responsible to the school staff, and not to the production department.

These student-apprentices started their factory work in the first wage category. In this factory, those in the first category received 18.72 rubles per month. By the time they had finished the school, they were at least as high as the sixth category. The school aimed to provide a training that would enable good students to go directly into the tenth category. (Highly skilled work.)

Students in another Moscow factory school, connected with the Trekhgornaia Textile Factory included all of the factory apprentices. This factory accepted as apprentices only those who were willing to take the factory school course. There were 300 students in this school—working under excellent conditions.

"The school has two aims," said the Director. "Indus-

trially we want to make a good worker. Socially, we want to make good citizens and good communists of the students. We therefore combine industrial theory and practice with a thorough grounding in social science."

The school gave a three year course. There were no workshops in its equipment. All of the technical bench training was given in the factory.

Another Moscow factory school, connected with the Amo Automobile Factory, had an extensive shop equipment, and some very good class rooms, organized on the laboratory plan. The director of this school was a woman, and a considerable number of girls were working in the metal and wood shop with the boys. All factory apprentices were required to attend this school for three or four years.

The large electric equipment factory in Kharkov maintained a factory school, an evening two-year course for technical training of its own workers, a school for illiterates, and a school for young children. I went out alone to visit this factory, and when I got to the gate, I asked for the factory school. The gateman directed me, but I found myself in the school for young children. I went into an office, got a new set of directions, and reached the evening technical school. At the third attempt, I reached the right school.

There were 360 students in this factory school—8 per cent of the total number of workers. The basis of selection was: 50 per cent from among the children of workers in this factory; 25 per cent from among children that had done the work of the city schools, and 25 per cent from the families of unemployed workers.

Students in the school were in the first wage category, receiving 15.80 rubles per month. Their school course was four years. At the end of that time they were usually receiving from 40 to 45 rubles per month, plus a bonus based on production. One third of the students were girls. All were required to have the equivalent of the first four years of the elementary schools.

The school began in 1922 with 18 students. When I saw it, there were 360 students and 18 teachers.

Positions in these factory schools are eagerly sought. In the first place, all of the students receive enough for the work they do in the factory to provide them with a considerable part of their living. In the upper years of the school, they are paid as much as unskilled workers in the plant. By the time they have finished the school, they are virtually guaranteed a place in the factory, and at a wage well above the average of the plant. If they display any aptitude they can soon become skilled workers.

From the standpoint of the factory, the factory schools guarantee an adequate supply of trained workers, who have received their practical work in the factory and who have done their school work under its direction. Furthermore, the factory school is a good selection point. The factory workers and the factory administration both have a chance to look over their future fellow workers while they are being trained.

Students in the professional schools are between fourteen and twenty. They are therefore in the same age group as American high school students. But unlike American high school students, they are not only expected to handle school discipline, but to take a part in maintaining the academic standing of the school body and to participate in the administration of the school.

When I walked in, unannounced, to talk to one of the teachers in the Red October Factory School, he greeted me, spoke about the work his class was doing (in the decomposition of water) and then went with me into another part of the school, leaving the class he was teaching without any comment. It was a group of husky fifteen year old boys and girls, and I looked for trouble.

"In whose charge did you leave that class?" I asked him.

"In their own charge, of course," said he.

"Is someone there responsible for the class?"

"Certainly, each group has its responsible committee.

We shall soon hear from them. It is time for school to close."

Before we had been talking five minutes this committee came to announce to the teacher that the hour was up, and to ask whether there was anything further for the class to do that day. The teacher answered in the negative, and the committee went back and dismissed the class.

When I went to visit the First Commercial Economic Technical School of Moscow I was taken into the office of the principal. Later, he showed me through the school. After I had been talking to him for about an hour, one of the students came in, introduced himself as an officer of the student body, and asked me whether I would have time to step into the student headquarters after I was through talking with the principal. Of course I went.

The students had an excellent, well-equipped room. There were thirty or forty members of the student body in the room, and without any formality they began to ask questions. First, they wished to know how American students were organized and what kinds of activities were carried on by these student organizations; second, whether the Dalton Plan was a success in the United States; third, whether there was any immediate prospect of the United States recognizing the Soviet Republic, and fourth, what the chances were for the development of a radical tendency in the American labor movement.

These students were organized in each group, as a whole student body, in trade unions, and many of them were members of political organizations. I asked the student representatives with whom I talked whether there was much interest among the students in these organizations. He assured me that there was. The assistant director of the school who was standing by shook his head: "The trouble is," said he, "to get the students to take an interest in anything else."

This school was directed by a school committee made up as follows: all the teachers (55); one student from each class (18); a representative of the commercial trade

union; a representative of the Board of Trade; a representative of the technical workers (janitors, clerks, etc.) in the school. The executive committee of the school consisted of the principal, two assistants, a member of the teaching staff, selected by the teachers, and a representative of the students.

The school committee of the Trekhgornaia Textile Factory School consisted of: the director; all of the teachers (20); the five students who were members of the student executive committee; an executive committee of three, who are members of the school committee, selected by a committee composed of one representative of each shift of students in the factory; a representative of the factory management; a representative of the culture sub-committee of the workers' factory committee; a representative of the Young Communists. Thus the educational authorities (who appoint the school director), the student body, the productive side of the industry, the workers in the industry, and the political interests of the workers were all represented in the school management.

At Stalinov the school committee of the factory school was made up in about the same way. On it were: the director; all of the teachers (30); 8 representatives of the students; a representative of the Communist Party; a representative of the Education Workers' Union; a representative of the Central Labor Union; a representative of the Young Communists; a representative of the factory management, who in this case was an economic expert attached to the factory, and three representatives of the technical workers in the school. The director of the school, who was the chairman of this school committee, was appointed by the educational authorities.

Students in professional schools were frequently members of some political or economic organization. For example, in the class which entered the First Commercial-Technical School of Moscow in the Fall of 1925 there were 222 students: 90 boys and 132 girls. Eight of these entering students were members of the Communist Party,

and 104 were Young Communists. Many of the students in this school also belonged to the trade unions that corresponded to the professional work they were learning.

All students in the factory schools belonged to the unions. At the electrical manufacturing plant in Kharkov, all of the students in the factory school were members of the Metal Workers' Union. At the Trekhgornaia Textile Factory in Moscow I was told that "the students become members of the union when they enter the school." At each factory school that I visited there was a union organization corresponding with the work done in the factory that supported the school. All such student members of trade unions paid one per cent of their income as dues to the union.

Professional school facilities are still very limited in the Soviet Union. As far as buildings and equipment are concerned, most of them cannot compare with the newer agricultural and technical high schools of the United States. Certain features of the Soviet professional schools are worthy of note, however: (1) Their work is more specialized, and is aimed more definitely at training the students for some technical position. In the United States many of the high schools train for college. The Soviet professional schools train definitely for work. (2) The laboratory method and the Dalton Plan have been adopted very largely, and the indications are that this tendency is on the increase. This is true in the factory schools as well as in the regular professional schools. (3) The factory schools, under their joint control, are a guarantee of a very high standard of technical and social training in the next generation of Soviet workers. (4) Through all of the professional schools the organization of the student body, for the carrying on of student activities, for the maintenance of discipline, for participation in school administration and for assistance in maintaining the academic standards of the pupils, is quite without parallel on any large scale in the United States.

VI. HIGHER EDUCATIONAL INSTITUTIONS.

a. HIGHER TECHNICAL SCHOOLS (COLLEGES).

Higher technical schools are the third rung on the Soviet educational ladder. With them must be included the rabfacs, or workers' faculties that have played so large a part in the history of Soviet technical education. There were 912 of these higher technical schools in the Soviet Union in January, 1924, with a student body of 159,176. Rabfacs numbered 136, with 45,601 students.

Higher technical schools were divided into six main groups: medicine, 66 schools; pedagogy, 331 schools; agriculture, 152 schools; industry, 219 schools; economics and social science, 53 schools; music and art, 92 schools. During my stay in the Soviet Union I had an excellent opportunity to visit a number of these institutions, and to talk with directors, teachers, student officials and students. In many ways, the work being done by these higher technical schools was as interesting as anything that was going on in the Soviet educational world, not because of what is taught, but rather because of the way in which the teaching, and in fact the whole administration of these institutions, is carried on.

Physical equipment in the higher technical schools was poor on the whole. Many of the buildings were out of date, and badly in need of repair. As a rule the laboratories were well equipped, and some of the libraries were excellently stocked with books and with current literature from all parts of the world.

"Lecturing" has been gradually abandoned in most of the higher technical schools. All of them were using some form of the laboratory system for their social science as well as for their natural science. On several of them a tutorial system was being tried out. Academic work generally seemed to be on a high level. Everywhere the students meant business.

A brief description of a higher technical school at Stalinov will give some idea of the conditions under which this branch of Soviet education is proceeding. This school is located in the machine-industry and coal centre of the Donetz Basin.

There were about 250 students in the technical school proper, about half of whom were taking work in mining, and the other half in mechanical and electrical engineering. The school provided the educational work, the living quarters and a part of the food which the students needed. It also allowed each student a stipend of twenty-five rubles a month.

An American, accustomed to the atmosphere of the ordinary college campus in New England or in the middle West, has a queer feeling in this institution. He does not get this feeling from the buildings or the equipment, which are much like buildings and equipment in the United States—not so elaborate, perhaps, but almost as up to date. Any American college of three or four hundred students would welcome these low, roomy buildings and this wide campus.

The queer feeling came from the students themselves. They were different.

Stalinov and the surrounding industrial region was entirely in the hands of the workers. It was they who, indirectly through their Government, and directly through their power to appoint students and to act on the governing board of the school, controlled the institution. No student could attend this school unless he came with the recommendation of some organization connected with the labor movement. As a matter of fact, most of the students came with credentials from their trade unions.

Before entering the school a student must have worked at least one year in some productive occupation. During his school vacation he must devote at least two months to practical work in his chosen calling. The Stalinov Technical College was a training school for the directors of working class industry. It was a workers' college in the most complete sense of that term.

Take, as an illustration, a student who had decided to become a mine technician. He worked at least one year in or about the mine. Then, with a recommendation from the Miners' Union he applied for admission to the College.

Under certain special circumstances he might be admitted to a training course that was connected with the College, without having completed the work of the lower school. Ordinarily, however, he had passed through an elementary school and a professional school. Having satisfied these requirements, the student was enrolled.

He took the regular work in mathematics, chemistry, metallurgy, history, drawing, etc. In addition, he and two or three of his fellow-students were assigned to one of the mines in the neighborhood. In this mine they spend at least one day in each week, and present a weekly report on the mine. During the summer they spend at least two months at this mine, and prepare an annual report on its condition and its operations. Unless, for some reason, they are transferred, these students spend three or four years studying the mine, theoretically and practically. When they have finished their work at the school they spend a year or two in practical mine work. If, by that time, they have demonstrated to the satisfaction of the school authorities and of the mining authorities that they are able to carry on the profession of mining engineer, they are given certificates of proficiency.

The student who enters this school has another experience of quite a different sort in store. When he is accepted by the institution as a member of the student body he becomes a member of a self-governing commonwealth. The students are represented on all faculties in the proportion of one student to two teachers; they participate in the administration of the institution; they are in complete control of student discipline; they control, through student committees, the housing and feeding of students, and the purchase and distribution of supplies. In every sense, academic and administrative, they are a part of the institution in which they are doing their work.

Probably that is the chief reason why these students are different from American students. Both in their studies and in their college activities they are, in large part, the masters of their own affairs. Already, while in college, they are going about the business of life.

Stalinov students are, on the average, only a very little older than American college students. But among them all there is not a single gentleman's son, and, so far as one may judge, not one who expects to become the father of gentlemen. They are workers. They belong to the unions that recommended them. Seventy per cent of them are Communists. They have turned their faces away from the past, and are building a new society.

Life is a struggle in the Stalinov College. The beds in the big dormitory have straw mattresses resting on boards. The food is plentiful, but very plain. It is served on board tables and eaten from wooden benches. There are few of the comforts and none of the luxuries of life. Still, students and professors alike step out buoyantly. They have entered, together, on a great adventure. Life has a meaning for them.

Evening work in a similar school was going on in Khar'kov, capital of the Ukraine. There the students came five nights a week, from six until ten o'clock. The course lasted four years. There were 436 men and 6 women in this school. Most of the students were taking work in mechanical or electrical engineering. No one could enter the school without the recommendation of his trade union. Those who complete the course are trained mechanical specialists.

All of the students in this Kharkov school were organized in their respective unions. In addition there was an organization of all the students in the school, with an executive committee, responsible for the conduct of student affairs. The teachers in the school had a similar organization. Both of these organizations were represented on a pedagogical committee that was responsible for the methods of instruction. The committee consisted of seven teachers and three students.

Some of the best class room work that I saw in the Soviet Union was being done in this Profintern Technical School. Every class room was a laboratory. This was as true of social science as it was of chemistry. There were tables (or benches) in these rooms, and the students were at work in groups around the tables. There was not a single class room with rows of seats, screwed to the floor.

I entered a number of the class rooms unannounced. In none of them did I find the teacher in evidence. Usually he was sitting at a table with one of the student groups. Lectures by the teacher and formal class room instruction seemed to have disappeared completely, leaving the students and teachers working together on common problems.

As an instance, the class in mechanical drawing was studying the ellipse. The instructor had distributed to each of the students a piece of pipe, a mechanical tool or a piece of machinery on which an ellipse appeared. In each case the students were measuring and computing the ellipse and then making a drawing of the piece of metal on which they were working. Not once in the school did I encounter such a thing as a "class exercise."

One left this school with a feeling that it belonged, not to the board of education or to the state, but that it was a joint meeting place for students and teachers, all bent on working out the same problems.

Across the Caucasus, in Tiflis, I visited an interesting higher technical school in which there were 708 agricultural students and 807 students in technology (1,228 men and 287 women). Before the Revolution there were no higher technical schools in Tiflis, but only the Georgian University, conducted in the Georgian language. Students from business-class families pay tuition in this institution. About six-sevenths of the students were on the free list.

There was a general school committee in control of the school, consisting of 120 teachers, 40 representatives of the students and five representatives of the trade unions.

This general committee was supposed to meet three times a year.

The main divisions of the school, agriculture and technology, also had their group committees, consisting of the professors, and one-quarter as many students. The group committees met monthly.

Student organization began with the trade union. Each student in the institution belonged to the trade union corresponding to the line of his specialty. It was from these occupational groups that students were elected to the governing committees of the school.

Tiflis lies across the Caucasus from Moscow. Georgia is a remote, and in many senses, an alien country, yet the essential characteristics of the higher education in the Transcaucasian Federation were the same as those of the Russian Federation. Readers will conclude, hastily, that this was the result of pressure from Moscow. How then explain the enthusiasm with which teachers and students alike were taking hold of the new system? The real answer seems to be that workers' control of educational institutions is a logical phase in the development of a workers' republic. When the republic reaches this phase, the educational institutions follow as a matter of course.

Near Moscow there is an agricultural and mechanical college with a student body of about 2,900. It is called the Timiriachev Agricultural Academy.

This Academy, originally opened in 1861, has had a checkered career. It was closed by the Government in 1894 because of the political demonstrations made by the students. At the present moment it is probably the most important agricultural school in the Soviet Union.

Timiriachev has three chief departments: agronomy, agricultural engineering and agricultural economics. It aims to train directors for the Soviet Government farms, local agricultural experts and workers to take charge of agricultural co-operatives. The course covers four years.

Lecturing has been abandoned in this institution. As one of the deans put the matter: "We no longer have examination accidents. Students work in small groups un-

der supervision. They are judged on what they accomplish from day to day, rather than on the old basis of a final examination."

"Subject commissions" were very fully worked out in this institution. A subject commission is a joint committee of faculty members and students which is responsible for planning the academic work of a course. In the Academy there were twelve subject commissions: five in the department of agronomy; four in the department of agricultural engineering, and three in the department of agricultural economics. In the last of these three departments the three subject commissions dealt with: the organization of agriculture; the organization of farming; agricultural co-operation.

Each subject commission consisted of all the teachers who worked in the department, together with one-half as many students. The largest subject commission, in plant cultivation, had 54 members,—36 faculty members and 18 student members. The smallest subject commission had 22 members. The students on each subject commission were selected by the students in that department.

Subject commissions met at least once in each fortnight. They were responsible for carrying out the academic program in their respective departments. When the plans for a new course were first made, they went to the subject commission for its approval. As the course developed, its direction was determined by the subject commission.

Student organization in this institution was very thorough. Six student trade union groups formed the basis for student activity.

Union	Trade Union Members	Young Communists	Communist Party
1. Foodworkers	173	34	45
2. Building	326	31	34
3. Sugar	109	16	47
4. Miners	135	7	23
5. Metalworkers	258	52	73
6. Land and Timber Workers	1,604	263	316
Total	2,605	403	538

Among the 2,900 students of the Academy about 300 were not members of trade unions. Most of these students were non-wage workers from the villages.

Each one of the student trade union groups has its organization, directed by an executive committee varying with the size of the group. The Land and Forest Workers had a committee of 14. All the others except the building workers had committees of 5. The Building Workers had a committee of 9. All six executive committees had an aggregate of 43 members.

Every six months the students of the Academy meeting in their trade union groups elected a Delegate Body—one delegate for each ten students. This made a total of 260 delegates.

The student general committee consisted of the 43 executive committee members, from the six trade union groups, and the 260 delegates elected to the Delegate Body. This student general committee met every three months, and at its first meeting elected an executive committee of eleven members.

There were four sub-committees under the direction of the student executive committee: (1) The economic, which had charge of providing for the material wants of the students. (2) The committee on club work, which had general supervision over the social life and activities among the students. (3) The academic committee, which worked on the scientific program, and considered questions of method in academic work. (4) The organizing committee, whose business it was to see that the students got into one or another of the student organizations. All forms of student activity were thus centered in the hands of an elected student committee.

Some money came to the student executive from the publishing activities in which it was engaged. The trade unions also provided money for needy students. These sums were handled through the student committees.

The president of the student executive committee, with whom I had a long talk, and who had all of this information at his finger-tips, gave a great deal of time to the

direction of student activities. Other members of the executive committee were also frequently called upon to do committee work. For this work in connection with student affairs, the members of the executive committee received from 20 to 40 rubles per month, depending on the amount of time that they were called on to devote to the student activities.

My visit to the Communist Pedagogical Institute in Moscow was very impressive. I was received by a committee of four persons—two members of the faculty and two members of the student body. I went to this school to ask about methods in pedagogy, and my talk with the committee was quite satisfactory. We discussed the success attending the various teaching methods that were being used in the Soviet schools, and I answered a number of questions on American education. Then I turned to the two students with the question:

“Why are you here?”

One replied for both: “All of the students in this school are prospective teachers, therefore they are all members of the Educational Workers’ Union. My colleague represents that organization of the student body. Beside their union membership, the students in this institution are all members, either of the Communist Party or of the Young Communists, as all expect to do Communist educational work. I represent the political organization of the students.”

“Are you two always called in when visitors come to the school?” I asked.

“Of course, we represent the student body.”

The head of the pedagogical department of the school spoke up. “When visitors come here,” said he, “they usually go to the students first, and look us up later on.”

The general school committee consisted of 40 teachers; 25 students, elected by the student body; the president and secretary of the student executive committee, and one representative each from the student trade union group and the student Communist group. The actual administration of the school was in the hands of an

executive committee consisting of nine members,—seven teachers, and the two student representatives from the trade union and Communist groups.

There are other kinds of higher technical schools, and there are many other things that might be said about these particular institutions, but I have tried to indicate some of the ways in which they differ most sharply from American institutions of the same grade.

Another group of higher technical schools—the rabfacs—were designed to take care of students coming directly from the factory, and who have had no adequate educational preparation for higher technical work. The rabfacs were created to meet an emergency. They will probably disappear as the emergency passes.

Students in rabfacs are mature people. All of them have worked for their living. Many rabfacs refuse to accept students who have not done at least three years of work in industry.

Rabfacs operate on various bases. In some of them the students do all of their school work by day. In others the students continue on their jobs by day and attend rabfac classes in the late afternoon and evening. Some of the rabfacs combine both of these plans by having the students attend evening classes for a part of the course, and day classes for the remainder.

Whatever the method of school organization, the purpose of the rabfac is the same—to take men and women directly from the factories and give them a technical training. Trade unions, or some other branch of the labor movement, pick these students, and in many cases support them during their school course.

The student who showed me through the rabfac at Vladikavkaz had spent several years in the United States as a land and timber worker. In the rabfac he was studying forestry.

“I did my best in the United States,” he said, “but I could never get a chance to start my educational work. Every time I got a little money saved, I lost my job,

and nothing ever came of my plans for a college course. I started a correspondence course finally, and just as I got well into it I was deported as an agitator. I left the United States as ignorant as I entered it."

"Do you agitate here?" I asked him.

"Indeed I do," he answered. "Every summer I go from village to village and tell the peasants about the new life that is ahead of them if they will just reach out and grasp it. That is one big difference between the United States and the Soviet Union. There I was nearly alone. Here my Union backs me. It helps me to come here to the school and it helps me to carry on this propaganda among the country-folk. A chap really cannot do this kind of thing single handed. It goes much easier when he is backed by an organization. I have found that out by bitter experience."

We opened the door of one of the class rooms. The teacher paid no attention to us, but one of the students in the class came out at once and asked us what we wanted. We told him, and then I asked: "Why did you get up and come out when we opened the door?"

"I am the chairman of the class committee," answered he. "It is our business to see that things go smoothly in the class. We take all such responsibility here."

Every group in the rabfac had such an organization. It was the disciplinary and administrative unit of student life in the Vladikavkaz Rabfac.

This rabfac was a day school. Students came to it from the surrounding towns and from the countryside. It was located in an old newspaper office that had been partly converted into school quarters. There were 150 students, divided into four main subject groups on the laboratory plan. In pedagogy, there were four classes; in technology, one class; in biology, one class. Three-quarters of these students were men; one-quarter were women. Those students who were not sent by trade unions were sent by village soviets. All spent from three to four years in the school.

The students lived in small groups of from three to six. These living quarters were provided and controlled by the students.

School administration was carried on by an executive committee consisting of the director of the school, one representative of the students and one representative of the faculty. The general school committee was made up of the director, six teachers, six students and six representatives of the local trade unions and political organizations.

In the whole region known as North Caucasus, there were nine rabfacs. Seven were day schools and two were evening schools.

Baku—the centre of the oil industry—had five rabfacs. There was one central institution in the city, and four others in the neighboring industrial towns. The central school was particularly well housed and equipped.

There were four rabfacs in Tiflis conducted in four different languages to meet the needs of the Georgian, Armenian, Turkish and Russian workers in the city. In Transcaucasia the language problem is particularly acute because of the great variety of nationalities and dialects. The Soviet authorities are meeting the problem by establishing schools that use the language of the local population. Where there are several languages, as in Tiflis, several schools are established.

The rabfac that I visited in Rostov was a large day school with 680 students. There was a night rabfac in the same building with a student body of 180. A quarter of the day students and a fifth of the evening students were women. Ninety percent of the students in this institution were supported, in whole or in part, by the unions that had sent them there. As a number of these students were mature men with families, the problem of support frequently extended to the family as well as to the student.

All work in the Rostov Rabfac was organized on the laboratory plan. I saw some excellent class work and teaching in this school. The administrative control of the

school was in the hands of an executive committee of five: the director, two members of the faculty and two representatives of the students.

Student organization was thorough. The students were organized in their respective unions: metal, land and timber, building, wood-working, railroad, mines, education. The Young Communists also had an organization. There was a general school organization of all the students, with an executive committee of nine, selected for a year, and sub-committees on academic work, co-operation, health, sanitarium care, food, domicile.

Educationally each *rabfac* represents the organized effort of a picked group of young workers to get a technical training. Economically, each is a self-governing, co-operative group of workers most of whom believe in the practicability of some form of communism, and who, in the course of getting an education, are prepared to practice its simpler precepts.

Students from Soviet professional schools go directly into industry. They have had a preparation designed to make them competent workers. A few, who seem to have unusual qualifications, go on into the higher technical schools, where they receive a training that is designed to make them competent technicians and managers.

b. UNIVERSITIES.

Soviet "universities" are really specialized higher technical schools, each operating in a designated field. Under the Soviet educational system, as it is developing, the university is not the highest stage of the educational structure, and in the old sense of a university as a collection of colleges, the Soviet universities are not universities at all.

There is a bad tradition of university life in the Soviet Union. Like other institutions of the old regime, universities are thought of as parts of a social system that is passing. The old Russian university was designed to meet the needs of the sons and daughters of the aristocracy and of the richer business men. Both classes have

practically disappeared from the Soviet Union, and in their places are the peasants and workers, with a different set of educational needs.

The Ukrainian Educational Workers, in a special supplement to their paper, *The People's Teacher* (Kharkov, 1925, p. 13), state the matter in this way: "The old ladder of successive steps (primary school, secondary school and higher schools) created by the bourgeoisie,—which distinguished: the school for themselves (the higher school), for their valets and allies (secondary school) and for the people (primary school) does not fit into our system. The limits of instruction are determined by the desired degree of qualification. The mechanical order of succession has been replaced by a succession according to specialization. And just as in industry we have workers 'of the line,' and specialists who organize production, the system of public instruction has its mass schools, its schools for specialists and its schools for organizers."

Prior to the Revolution, the sons and daughters of the ruling class went to the universities, in many cases, for the same reason that many of the sons of well-to-do folks in England and the United States go to the universities—because it was the thing to do. Other young people in their social circle were going and they had little choice.

Soviet social organization has dispensed with this leisure class attitude toward higher education by dispensing with the leisure class. It has thus eliminated that part of the former student body which went to the universities because of the social advantages connected with a university training. The students who are left in the institutions of higher learning are preparing for some specialty.

Beside the sons and daughters of gentlemen, there were two groups of students in the pre-revolutionary universities. One group came for professional training—medicine, engineering. The other group came for advanced work in science, philosophy, or some other field of learning. These two groups are being taken care of, under the

Soviet educational system, by institutions that are in many cases wholly separated from the universities. The students who desire professional training go to higher technical schools. The students who are looking for research work go to the institutes. Such developments deprive the universities of much of their old field.

Such developments seem strange, at first sight. When "the elimination of the university from the educational system" was first broached to me by a Soviet educator, I was a little shocked. The idea had never occurred to me. But he explained it in this way:

"Universities in the old sense are really anomalies in the modern world. They originated at a time when the knowledge that was taught in school could all be found in books. There were no laboratories, except the work-rooms of the alchemists, and they were in greater or less disrepute. At such a time it was quite practicable to centre the theological, legal, philosophical and other university courses under one roof, and to have professors and students live and study and talk there together.

"Then there was a period of transition—the period of the introduction of science into the universities. Chemistry and physics, mechanics, geology, biology came, one by one, to take their places beside the old class rooms. In a very real sense, they came to take the places of the old class rooms, since all of the students of specialties were now working in their special laboratories, leaving the strictly class room work for the students of classics.

"Most of the Russian universities were built and equipped during this second period, and as you visit them, you will observe that they have excellent laboratories, and in some cases, exceptionally equipped ones."

This was true. Some of the equipment in the chemistry and physical departments of the Russian higher schools was as good as anything that I ever saw in an American university.

That second period in the life of modern universities passed very quickly. Before the World War, in Ger-

many, and particularly in the United States, a new type of university work was developing,—in the industries themselves. My informant said:

“It was idle for a university to try maintaining an electrical laboratory side by side with a well-equipped electrical plant. The electrical plant was itself a laboratory, and the theoretical work that it needed was done on its own premises, by its own experts. Sometimes these were university men. More often they were giving their whole time to the work of improving the industry. What folly to duplicate the electrical plant when the students from the university department of electrical engineering could do their practical work in the plant.

“For the last thirty years, in the great industrial centres of the West, universities have been sending their students of mechanics into mechanical plants, just as they sent their students of medicine into hospitals. Specialization, and the very rapid development in various mechanical fields made this inevitable.

“We, here in the Soviet Union, have realized this trend, and we have carried the process one step farther. Since it is impossible to put all of the study and research work into four walls, why try to do it? Since study and research are being carried on in connection with all of the more important institutions, why not have the students go where the study and the research are being carried on?

“If we desire to make an investigation of serums and vaccines, we organize an institute, appoint a staff, provide quarters and have the work carried on under the direction of the health department. A student interested to become a specialist in this field of public health could scarcely do better than become an apprentice in such an institute.

“Every great industrial plant has its department of research and investigation. Students who are interested to pursue that line of inquiry belong there. Of course their work should be directed, just as the work of every apprentice should be directed. But their work-place, as apprentices, is the industry rather than a college campus.

"You began this in the West, with your Pasteur Institutes and Rockefeller Institutes. But they were exceptional. You still cling to the old forms of educational institutions because you still live in the old society. We live in the new society, and we are therefore creating new forms.

"We feel that it is neither possible nor desirable to centre all learning and all research at one point—the university. The learning must be done at the point where the work is being done—mining engineers must study in the mines, and hydraulic engineers in hydraulic plants. We are creating special higher schools at the points where specialized activities are in progress, and our students spend a good share of their time at work in the specialized plants. Since the work of the world cannot all be done at one point, we regard it as unreasonable to suppose that all of the apprenticeship for life's activities can be centred at one point."

There are still universities in the Soviet Union, particularly in the old centres of population, but their tone has changed with the changing complexion of the student body. The First University at Moscow has about 9,000 students, organized as in the other higher schools. About 7,000 of them are organized in eight trade union groups: health workers, education workers, chemical workers, land and forest workers, workers in trades, metal workers, miners and railroad workers. Each one of these student unions has its own organization. Each union selects one delegate for every fifteen members. The delegates, meeting together, constitute the student delegate organization, which is in control of all student affairs in the university. Its executive functions are performed by a committee of fifteen, chosen by the delegate body. Seven of the fifteen executive committee members give a large part of their time to the various student activities, and by way of compensation they are paid from 30 to 40 rubles a month.

Every faculty in the University has its program commission consisting of faculty members who give the courses and half as many students, elected by the student body in

that particular department. Work is planned, supervised and directed by these program commissions.

About 45 per cent of the students in the First University receive stipends that average 23 rubles a month.

I obtained this information from one of the members of the student executive committee and from representatives of the University administration. The students seemed to play much the same role here that they did in other higher technical schools.

Another university that I visited in Moscow was the University of Eastern Culture, organized directly under the Central Executive Committee of the Soviet Union. The University aims to "prepare highly trained and skilled Marxists, who can do the work of the Communist Party, and other work that the Party directs." The University is therefore a part of the organized educational work carried on by the Communist Party.

Students were accepted from all parts of the Soviet Union. Since the work was specialized along the line of Eastern culture, most of the students came from the eastern portions of the Union. They took courses in economics, philosophy, history, social development, political theory and organization, and the like.

Educational method in the University of Eastern Culture was in a stage of transition. Some of the departments were working on the seminary plan, some on the laboratory plan. Under the seminary plan, students were organized in class groups of 25 or 30, each member of the class selected a topic (or had one assigned) and then made a report on it to his seminar. Under the laboratory plan, the students worked in groups on group topics. At the time of my visit, there was no general agreement in the institutions as to which was the better method.

"We are still working on that question of method," the assistant director of the institution told me. "We are in an experimental stage, and are trying out a number of different ways of getting our work done. When we are convinced what method is best, we shall adopt it generally in the institution."

The course is for three years. Students select the department in which they wish to work and they then have their general line of study mapped out by the subject commissions.

Student organization in this institute was different from that in most of the other institutions of higher education that I visited. All of the members of the University—teachers, students and technical workers were eligible to join a labor commune. Membership was practically obligatory for the students and optional with the others. The labor commune elected an executive committee of nine members, all of them members of the student body. The members of the faculty might be called in as experts or as advisers, but they were not members of the executive.

Labor commune activities were subdivided into the following departments:

1. Economics,—having charge of the clothing, feeding and equipping of the students.
2. Pedagogical and educational,—having charge of the general educational policy, the standards of student work, etc. Its activities were directed by a pedagogical council.
3. Medical and sanitary,—having charge of physical culture work, and of the health of the students.
4. A comrade court in which all matters of discipline were handled.
5. An administrative department having charge of the machinery of student organization.
6. A bureau of mutual aid to see that students were properly provided with necessities.
7. A sub-committee of eight in charge of the care of student families.

Like the students in the Institute of Red Professors, the student body in the University of Eastern Culture was made up of mature people who were convinced that a new social order was possible, and although they represented various nationalistic and racial groups, they were all joined together in a mutual benefit association as an effective demonstration of the way in which peoples from dif-

ferent parts of the world and of different human types could get on together.

While the labor commune in this institution was not giving perfect satisfaction, there seemed to be a general feeling that it was a start in the right direction. Like the organization of the pedagogical department of the institution, student organization was in an experimental stage. The student body, like the faculty, was looking for a better way to achieve the ends that they desired to reach.

Universities, in the old sense of collections of faculties, representing all of the departments of human knowledge, are being rapidly replaced in the Soviet Union. They persist in the older centres, but as the new educational life is organized higher technical schools are being established for each field of knowledge and of activity. These schools are being located at the points where practical contact with the various lines of special activity is most possible,—mine schools near mines; schools of electrical engineering near electrical industries; transport schools at shipping centres, and so on. This specialization of higher education leaves a specialized field for the university. It provides certain forms of training, particularly in the fields of social science, that are needed by highly specialized workers in diplomatic and other fields.

C. INSTITUTES.

Institutes are the fourth rung of the Soviet educational ladder: elementary schools; professional schools; higher technical schools (and universities), institutes. A higher technical school exists to train technicians and managers in some designated field. An institute is a centre of what would be called graduate work in the United States.

Soviet institutes are designed to meet three specific needs: the technical training of the leaders of Soviet economic, political and social activity; the training of teachers for higher technical schools and universities; the study of technical problems in all fields of human knowledge by

the laboratory method. For the most part, they are centres of research rather than of teaching.

Soviet authorities create an institute wherever they meet a unit problem. This is true of the social sciences as it is of the natural sciences. At present the institutes of natural science in the Soviet Union outnumber the institutes of social science. The largest single institute in the Republic is the Pavlov Institute at Leningrad, which is carrying on psychological research. With the exception of the Pasteur Institute and the Rockefeller Institute, this is probably the best equipped institution of its kind in the world.

At the time of the 200th anniversary of the Russian Academy of Sciences, in the summer of 1925, a list of the institutes in Moscow was printed. Beside the libraries, museums and galleries of the city, this list included: the State Institute of Electrotechnics; the Central Aero-Hydrodynamic Institute; the Thermotechnical Institute; the Scientific Chemico-Pharmaceutical Institute; the Institute of Biological Physics; the State Scientific Institute of Public Health; the Institute for the Control of Serums and Vaccines; the Institute of the Physiology of Feeding; the Microbiological Institute; the Tropical Institute; the Institute of Sanitation and Hygiene; the Bio-chemical Institute; the Institute of Experimental Biology; the State Institute of Tuberculosis; the State Institute of Social Hygiene, etc. There was undoubtedly some overlapping in the work of these institutes, but the aim was to have each institute deal with a special problem.

While I was in Moscow I had a chance to talk with some of the men and women who were organizing institutes of social science. One such group was working out an Institute of Agrarian Economics under the Department of Agriculture. The Assistant to the Secretary of Agriculture was at the head of this Institute; it had an executive board of seven members, all of whom were experts in agricultural economics. The Institute was founded to make a study of the relations and of the necessary economic adjustments between the life of the rural, agri-

cultural population and of the urban, industrial population.

Economic relations between farmers and city workers are as strained and as unsatisfactory in the Soviet Union as they are in the United States—probably more strained because of the backwardness of Soviet agricultural methods. The two groups work on different economic levels. The farmer uses hand tools and animal power. The city industrial worker uses machine tools and mechanical power. The result is a baffling maladjustment. Nowhere in the world has this difficulty been met. Everywhere it demands a solution. The Institute of Agrarian Economics was organized to study the problem and to find the answer.

A building had been set aside for the use of this Institute, a staff of experts had been appointed; a library was being collected, consisting of books, magazines and documents in Russian and in the principal languages of the West; the chief papers of agricultural economics from all parts of the world were being subscribed for; a plan of study was being outlined, and the work of the Institute was well under way.

During the time that I was in Moscow, this Institute was actually in the make, and I could not help feeling how like a military campaign the whole thing was being handled. The best of equipment and materials; the best men available; plenty of funds—all were put at the disposal of the enterprise. No European king ever entered upon a scheme of conquest with more zest and with more willingness to spend time and money in the attempt. But this was a conquest in the realm of economics,—a scientific conquest, to which the best minds and the surplus wealth of the country were being devoted. It was the scientific organization of man's effort to subjugate nature and to organize society.

Another institute in the field of social science, somewhat farther advanced in its organization, was the Institute of World Economics and Politics, founded in April, 1925, under the auspices of the Communist Academy.

The purpose of this Institute was to collect and publish information bearing upon the major world economic and political relations. The exact program was being worked out by the staff of the Institute while I was in Moscow.

This Institute was directly under the Communist Academy, which is "the highest organ of scientific investigation in the Republic." The Council of the Communist Academy had appointed a Director for the Institute, a Secretary and an executive board of scientists who were experts in this general field.

Such was the executive group responsible for the work of the Institute. It was given a large building, renovated and equipped for the purpose. It had secured an initial library of about half a million volumes. The Institute subscribed to 60 daily papers from the principal capitals of the world; to 130 economic and social science journals; to the Babson Statistical Service; to the Harvard Business Service; it had the Bulletins of the United States Federal Reserve Board on file, and much other similar material, that was arranged, cataloged, and accessible.

Up to the time that I left Moscow, the staff of this Institute consisted of only eight experts. Others were under consideration.

Any person wishing to join the staff submitted credentials to the executive board, consisting of the work that the applicant had done in the field of social science—studies made, articles or books published, etc. If they proved satisfactory the applicant was placed on the staff at a salary of from 150 to 200 rubles per month. (The highest officers in the Government received 192 rubles per month; an engineering expert received from 150 rubles to 300 rubles per month.)

The staff outlined the work to be done by each of its members, in connection with a general plan approved by the executive board. Reports were made on this work at Staff meetings. When one unit of research work was completed by a member of the staff, it was submitted for approval to the staff, and if passed by them, to the Executive Committee of the Institute. The work was then pub-

lished in a monograph, and the writer received a regular fee of 100 rubles for each 16 printed pages of the study.

A journal, *Les Annales Internationales*, was also published by the Institute. To this journal, the members of the staff and other specialists contributed, and were paid at the rate of 100 rubles per 16 printed pages.

There was no teaching work of any kind connected with this Institute. It carried on only research. Said the Secretary: "We are working out an important series of economic and political problems. That is our subject matter. On the question of method we are trying to devise a plan that will give liberty to scientific workers and elasticity to scientific work, at the same time that it coordinates the activities of those working in the same field, and offers them an outlet for the results of their study. Our Institute is a little republic, studying world social science."

A third Moscow Institute dealing with problems in the field of social science was the Marx-Engels Institute under the direction of the Marxian economist D. Riazanov. This Institute, organized by the Central Executive Committee of the Soviet Union, was making a collection of the material and literature bearing on Marxian economics and philosophy. At the same time it was planning a complete published collection of all the works of Marx and Engels. A complete edition of the works of Plekhanov, the Russian Marxian scholar, was being issued by the Institute. Twenty volumes of this set had already appeared.

The Institute was well housed, and its quarters were being enlarged. Its library had reached considerable proportions. It had what is probably the finest collection of first editions of Marxian writings that exists anywhere in the world. Its reading room was very well equipped, and stocked with current economic literature from all parts of the world and in all of the chief languages. Experts were at work, in various departments,—some natives of the Soviet Union, some natives of other countries, some Communists and some non-Communists,—doing various pieces

of research in connection with the publications of the Institute. I have never been in an institution of social science research where the facilities seemed to be better, and where the atmosphere was more scholarly and conducive to good results.

These three institutes that I have briefly described were all devoted exclusively to research. Another institute that I visited in Moscow, the Institute of Red Professors, was a training school for teachers in the more advanced social science institutions and departments.

The Institute of Red Professors specialized in the training of teachers in economics, history, philosophy and political science. Students who were candidates for admission to this Institute presented a thesis on some problem in social science: "Marx and Ricardo," "American-English Diplomatic Relations," "The Influence of Foreign Capital in Russia," were some of the topics discussed. If the thesis was accepted, the student took four examinations: political economy, philosophy, history of the West, and Russian history. These examinations successfully passed, and the student was ready for his three year course in the Institute.

When I reached the Institute, the Secretary, Maria Dodonova, asked me to wait a few moments, while she sent for one of the students. When he came, she introduced him as the chairman of the student pedagogical committee. "He will answer your questions," she said.

We three sat together, I asking, the student answering, and occasionally referring to the Secretary for details. Most of the answers he knew, however, and in abundant detail.

Students in the Institute were generally Communists, he told me. All were expected to be able to handle at least two foreign languages. We held this interview in English.

Academic work in the Institute was divided into six groups: political economy; Russian history; history of the West; philosophy; jurisprudence; co-operation. Students picked the groups with which they wished to be con-

nected, and were expected to do two pieces of research work per year during each of the first two years. During the third year each student prepared a thesis, which had to be good enough for publication.

All academic work was done in seminars. There were twelve such seminars in the first year class, twelve in the second year class and six in the third year class. Each seminar selected its own teacher, who might or might not be on the regular faculty of the Institute. This year one of the seminars desired to study the Social Democratic Party of Germany. Since no member of the regular faculty was an authority on this subject, the seminar called in a man from outside the Institute. In such cases the administrative board of the Institute must pass on the qualifications of the desired teacher.

Seminars were small—twelve, fifteen or eighteen persons. Themes were typed and distributed in advance of the session at which they were to be presented. All were specialized and technical. For example, a student who was working in the economic group during the first year was required to cover the theory of wealth and distribution and the history of political economy. During the second year, he worked on money and credit and markets and crises. For his third year's work he selected a thesis theme.

Each year about thirty per cent of the graduating class was picked by the student organizations, confirmed by the administration of the Institute, and sent for a year of study to some Western country. Expenses were met by the Institute. All students during their residence in the Institute received 130 rubles per month.

Students were therefore in the pay of the Institute. During their three year course, and as a part of their work, they were required: (1) To teach workers in a factory for at least four hours per week throughout the three years. This kept the students in constant touch with the workers. (2) To teach, during their first year, not less than six hours per week, in some elementary school, some factory school or some rabfac. This gave the

necessary training in pedagogy. (3) In the second and third years, this teaching must be done in some higher technical school or university. This provided contact with the highest educational work of the Soviet Union. The three year course was therefore a combination of theoretical study and research, with practical pedagogy.

All students belonged, of course, to the Education Workers' Union, since all were preparing for educational work. They were also organized administratively and pedagogically.

Each of the thirty seminars had a secretary. These thirty secretaries, with one of their number selected as chairman, made up the student administrative body of the Institute.

Students in each of the six general courses (political economy, *Russian history*, philosophy, etc.) chose a dean. The six deans, with one of their number, selected as chairman, made up the student pedagogical body of the school. The student who was giving me the interview was chairman of the board of deans.

All course outlines and proposals for courses go first to this board of deans, composed entirely of student representatives. If they are acceptable they are passed on to the administrative committee of the Institute for approval. All proposals involving questions of an academic or pedagogical character, whether they come from students or from faculty members, must first receive the sanction of the board of deans.

The administrative body of the Institute consists of the Director, the Secretary, three members of the faculty, and two students,—the chairman of the student administrative body, and the chairman of the board of deans.

Readers who know graduate schools in the leading universities of the United States can imagine the feelings of astonishment with which I confronted such an academic organization. In an American graduate school the faculty is in complete control (except for the veto of the board of trustees); the courses are offered and approved by the faculty, and the students take them or leave them as they

like. Here students and faculty were working together, with the students carrying a large share of the responsibility for the academic and administrative work of the institution.

The matter is easily explainable. First, the entire Soviet educational system is on a foundation of administrative and pedagogical self-government. Second, some of the ablest of the younger men and women in the Soviet Union are taking work in these higher educational institutions, and it is their wish that they should carry part of the responsibility for the institutions with which they are connected.

The man who was relating these facts to me in such careful detail was perhaps thirty years of age. As chairman of the student pedagogical organization he knew his business thoroughly.

"Tell me," I asked, "how you got into this institution?"

"From the army," said he. "Eighty per cent of the students now in the Institute were in the army during the Civil War."

"How did you get into the army?"

"I was a student of history when the World War broke out. After the Revolution, for three years, I was a political representative of the Communist Party in the army. Then the Civil War came, and I went into the active service."

"Why did you leave the army?" I asked.

"My interests do not lie in the field of military activity," he answered. "As soon as the Civil War was over, I got a leave of absence and came here."

"What was your position in the army?"

"A commandant," he answered. (That term is used for all Soviet army officers above the rank of major.)

"How many men did you command?"

"Thirty-six thousand," he said quite simply.

"Then you were a brigadier general, or something of the sort?"

"As to that I do not know," he said. "We do not have such distinctions in the Red Army."

"And now you are studying to be a teacher of economics?"

"Exactly. That is where my real interest lies, and it is in that field that we will do our real work.

He shook hands and went about his business. I took my leave of the Secretary and came away realizing that when brigadier generals go as students into pedagogical institutions, the standards of institutional life may easily be raised.

Such is the work that was going on in some of the Soviet institutes that I visited. I have described only the institutes in the field of social science. If a representative of the physical sciences could make a study of the institutes covering that field, he might come away with an equally interesting picture. As to that I cannot be sure. I can report only on the field that I know.

Generally speaking, the institutes in the field of natural science are older, larger, and more mature than those in the social science field. They had their beginnings long before the Revolution. The social science institutes were impossible then.

Institutes are organized directly under some department of the government, like the health department, or else they are part of the scientific work carried on by some scientific organization, such as the Academy of Sciences at Leningrad or the Communist Academy at Moscow. The latter includes, at present, three institutes, and a number of sections and departments. One of these institutes is the Institute of World Politics and Economics; a second is the Institute of Soviet Laws and the Form of the Soviet State; the third is a Neurological Institute. Among the sections of the Academy there is one on Art and Literature; one on the General Theory of Law and Jurisprudence (this section publishes a law encyclopedia); an Agrarian section, and a section on Scientific Methodology. The Academy is issuing a Soviet Encyclopedia that will appear in about 40 volumes. It also passes on the program of scientific work carried on by all of its institutes and sections.

This is organized scientific research, in all of the departments of human knowledge. As yet it is scarcely begun. Many of the institutes are new. Facilities are limited. The work has been held up through lack of funds, and through the destruction wrought by war and famine, **but the trend is unmistakable.** These people are taking science seriously. There will be a revision of programs and a great deal of readjustment and shifting of fields of work, but in the main, these propositions will evidently be followed:

- (1) For each important problem that arises there must be an institute, equipped with the necessary building, library, laboratory, and other facilities.
- (2) The staff of this institute must consist of experts in the field—the best that can be found in the world, without relation to their political or social opinions.
- (3) Each problem must be studied as a scientific and not as a Russian problem. Therefore the research must include work, not only in the Soviet Union, but wherever the problem appears.
- (4) The solution of any scientific problem, and therefore the work of each institute, consists in contributions that will enable the members of the human race to make a better adjustment to their environment.
- (5) Institutes are institutions in which trained specialists do their work, and in which apprentices learn to do the work of trained specialists. Their main function, however, is research and not teaching.

Many of the ablest men and women in the Soviet Union are already at work in the institutes. Experts are coming in from other countries to make their contribution. The most promising of the students in the higher technical schools are being added to the institute staffs. By such means, science is conspicuously turned to social uses as one of the most important parts of the Soviet educational program.

VII. EXPERIMENTS WITH SUBJECT-MATTER —THE COURSE OF STUDY.

Something has already been said, in the chapter on elementary education, about the kind of program that is being tried out in the Soviet Schools. Soviet educators are striving to create an educational system that will meet the needs of the new society that they are building. There were no real precedents for this task. There had been many isolated educational experiments, but as the Soviet Union was the first workers' republic, its educators faced a new educational situation.

Programmes Officiels de l'Enseignement dans la Republique des Soviets is a publication of the Educational Workers' International that gives a very full account of some of the earlier efforts to shape a program for the elementary schools, together with a large part of the program that was being experimentally tried by the Soviet schools in 1924-5. (The pamphlet contains 92 large pages, and can be had for twenty-five cents from the Secretary, L. Vernochet, 33 Rue Grange-aux-Belles, Paris, France.)

The Scientific State Council of the Russian Republic had been working systematically on the question of subject matter, and of method in the handling of subject matter. In 1923-24 a tentative plan was published, with instructions to teachers to try it out, to discuss it in their educational meetings, and to pool the results of their experiences. By 1924-5 this plan was to be generally applied, as modified, to the two lower grades of the elementary schools. What was this plan?

Soviet educational authorities explained its purpose in these terms: "Children of workers and peasants do not go to school in order to leave their class, to rise above it, to become intellectuals, as was the case in former times,

but in order to join the organized advance-guard of their class, and to become worthy collaborators and comrades of the workers and of the revolutionary peasants" (*Programmes Officiels*, p. 59). Therefore "at the foundation of the whole program lies the study of human labor and its organization. The point of departure is the study of local labor." (Ibid. p. 15.) From its beginning to its end, the Soviet educational system is built upon the study of and the participation in human labor. Students are either learning about labor, or they are preparing for labor, or they are sharing in labor. (The term "labor" means, of course, not hand work, but, in the terms of the Soviet Constitution: "effort that is productive or useful to society, including housekeeping.")

Thus far the subject matter has been worked out most completely in the two extremes of the program: in the lower grades of the elementary schools and in the higher technical schools. The same principle is being applied, however, to all grades of the educational system.

Perhaps an idea of the direction in which this theory is leading can best be gained by quoting a part of the official program of the elementary schools in the Russian Republic. This program is intended to give the younger children a certain minimum of orientation to the life surrounding them, and a certain minimum of experience in the actual processes of labor and of social organization.

The official program of the labor school as tentatively adopted by the educational authorities of the Russian Federation on March 5, 1923, is, in brief outline, as follows: (This summary is taken word for word from the official program, which gives first a brief summary and then an extended elaboration.)

"I. Outline of the program for the school of the first degree (8-12 years).

"1. First year.

- a. *Nature and man.* The seasons of the year.
- b. *Work.* The daily work of the family in the country and the city.
- c. *Society.* The family and the school.

"2. Second year.

- a. *Nature and man.* Air, water, the sun. Plants and domestic animals and their needs.
- b. *Work.* The work of the village and of the part of the city in which the child lives.
- c. *Society.* The administrative institutions of the city and the village.

"3. Third year.

- a. *Nature and man.* Elementary notions (observations) of physics and chemistry. Local nature. The life of the human organism.
- b. *Work.* Economy of the region.
- c. *Society.* The administrative institutions of the region. The history of the region.

"4. Fourth year.

- a. *Nature and man.* Geography of Russia and of other countries. The life of the human body.
- b. *Work.* The national economy of the Soviet Union and of other countries.
- c. *Society.* Organization of the state of the Soviet Union and of other countries. Pictures of the past life of the human race."

The outline for the next three years is very much more detailed. I will therefore reproduce a sample—the portion devoted to the sixth year: (pupils of 14 years).

"a. *Nature and man.*

- 1. Sufficient physics and chemistry to understand:
 - A. The lives of men and animals;
 - B. The application of these sciences in industry (construction of machines and motors, electricity, etc.).
- 2. Minerals, mines, combustibles. Russian mineral regions and coal fields.
- 3. Industrial animals and vegetables.
- 4. Man as a member of the animal world. His anatomy and physiology.
- 5. Hygiene of physical and intellectual work. The organism well and sick.

"b. *Work.*

- 1. The extraction of minerals and combustibles.
- 2. Chemical and mechanical industry. Hand work, manufacturing, factory industry. Organization of work in a small shop, in a factory and in a manufacturing plant. The development of different branches of industry in Russia and in other countries. Divisions of the Soviet Union.
- 3. Technology of agricultural production.
- 4. Anthropological geography. Man and human society dependent on the natural environment.
- 5. Man as a worker. The organization of his work. Hygiene of work and workers' health.

"c. *Society.*

1. The workers and the capitalists. Wage labor and capital. Private property and labor. The situation of the working class. The union of aristocrats and capitalists. Constitutional monarchy. The republic Bourgeois dictatorship. Capitalism. Competition. The chaos of production. The struggle between labor and capital. The Chartist. The year 1848. The Communist Manifesto, expressing the aspirations of the working class. International association of workers. The First International. Effort of the workers to take power: the Paris Commune. The Second International. The struggle through strikes. Trade unions. Political parties. Capitalism in Russia. Survivals of Feudalism. Monarchy. The struggle against it in 1905 and in 1917." (*Programmes Officiels*, pp. 7-8.)

These are samples of the type of subject matter that is being presented in the Soviet elementary schools. The official program goes into greater detail, but these quotations are extensive enough to give a good idea of the type of material that the younger children are asked to handle, under the three general headings of "nature and man," "labor," and "society."

Additional light is thrown on this problem of subject matter in a section of the official program which sets forth the specific aims that the subject matter is intended to accomplish. These aims are summed up in this way:

"It is evident that these exercises in the elementary schools do not constitute a preparation for a particular profession. It implies general preparation and general study of the work necessary for each adolescent, independent of the profession or the trade that he will choose in the future. As the greatest common divisor, this sum will appear in all of the professions, in all of the skilled work, thus representing the minimum of knowledge necessary before beginning to learn a profession or trade.

"The program, or, better, the total of this general knowledge of the processes of labor, may be divided into the following groups:

"Minimum of knowledge and of habit of work that should be known to pupils who finish the first section of the elementary school. (First 4 years; ages 8 to 12.)

"A. Habits of orientation.

1. Orientation in space: the determination of any point in the town or in the region, on a map.
2. Orientation in time: the determination of the time necessary to travel a given distance, or to do some simple piece of work.
3. Orientation in distances and in quantities: simple arithmetic, utilization of the multiplication table, of the scales, simple and decimal weights and measures.
4. Orientation in quality: determination of the approximate quality of the articles of primary necessity.
5. Orientation in all of the administrative institutions: the securing of information in any of these institutions.
6. Orientation in all forms and in all the means of locomotion and of communication: utilization of the tramway, the train, the post, the telephone, the telegraph, etc.

"B. Habits in the doing of definite tasks.

1. Composition of the plan of a yard, of a house, of a street, of a region.
2. Drawing and designing simple objects.
3. The writing of reports on work done.
4. Preparing of a plan of work to be done.
5. Preparation of a report on any occurrence.
6. Making of a budget, of an account, simple bookkeeping.

"C. Habits of work in the home.

1. Individual hygiene. . . .
2. Hygiene of the home. . . .
3. Scouring and cleaning clothes and linen.
4. Simple cooking.

"D. Habits of utilizing simple conveniences and of installing certain comforts.

1. Simple repairs of the house, the furniture.
2. Utilization of electricity.
3. Simple repairs of the above.
4. Taking down, cleaning and setting up simple machines. . . .

"E. Habits of farm work.

1. Elementary needs of domestic animals and vegetables.
2. Work, according to age, in the fields, the flower garden and the vegetable garden.

"F. Habits of scientific work and research.

1. The conduct of systematic observations on any phenomena.
2. The systematic collection of facts and documents concerning any question.
3. Utilization of a dictionary, of an agenda, of a catalog, of a paper, of a review, of a guide, etc.
4. Utilization of a museum, of an exposition, of a library, of archives, etc.

"G. Habits of work in political and administrative organizations.

1. Participation in general meetings, presiding at general meetings, preparation of minutes.

2. Individual and collective execution of certain social tasks, and collaboration in the work of the different organizations.
3. Organization of social enterprises (circles, societies, co-operatives, clubs, recreations, fetes, etc.).
4. Composition of a wall newspaper, of statements, reviews, etc.

"Most of these habits will be naturally acquired along the plan indicated, by the methods of teaching applied to active work; if the school understands how to profit by every occasion to permit the students to put in practice—in socially useful activity—the theoretical knowledge they have acquired." (*Programmes Officiels*, pp. 47-49.)

Subject matter, under this program, is no longer reading and writing, spelling, arithmetic and history. Subject matter is the world we live in and the things we do in it. But what of reading and writing and arithmetic?

They come in, incidentally, but none the less surely, as they are needed. "In the course of studying phenomena, our pupils will be compelled to get enough exercise in reading, writing and arithmetic. There is no danger that they will fail to learn these things, without which they cannot study any of the themes." (*Ibid.* p. 13.)

But the themes come first. The pupil must have an interest, a desire to find out; a reason for wanting to know how to read. He must wish to investigate some fact that he has observed, to take part in some activity that is going on around him. Then the instructor says to him: "You wish to join this organization of pupils that is running the student life of the school? But what use will you be there if you cannot read and write, multiply and divide? If you wish to take part in the activity of your group, you must be able to communicate with your group,—to read what they write, to write to them, to express yourself in figures." Then, because the pupil has an interest in the thing he wants to do, he will acquire the means that are necessary to do it. "It is only necessary that the means should not be too far off, and that the children should feel and see that, relatively, it will be useful." (*Ibid.* p. 47.)

To what extent is this new course of study being used in the Soviet Union? I did not go into a single elementary

school where some form of it was not in operation. The completeness with which the new program has been adopted depends upon many factors, but principally upon the ability and training of the local educational authorities. In the smaller villages, the individual teacher must initiate. There seems to be no lack of good intentions. Many of the village teachers are poorly equipped, however, and they do not know how to put a new system into practice. In the city schools, some modification of this program is being generally experimented with. None of the Soviet educators pretend that this is a final word on their educational program. They believe, however, that it is an advance over the programs now in use in many of the western countries, and they are unanimous in their agreement that it is the best educational program that the Russian schools have ever had.

VIII. EXPERIMENTS WITH METHODS OF INSTRUCTION.

The method of handling subject matter as followed out in the Soviet elementary schools makes them experimental in character. In a sense, each lesson is a joint experiment in which the students and the teacher select the subject matter. Each class keeps its record of daily progress. Each group decides within the bounds of the course of study, what it shall do.

Montessori's system was based on the same educational principle. She gave the child a choice between different activities. Her plan was neither so thoroughly social nor so practical as that adopted in the Soviet Union, where the group method of selection is followed, and where the material selected comes from the community and not from a cupboard.

Pupils, under the Soviet system, are investigating constantly. It might almost be called a method of research, applied to the elementary grades.

Work is done in groups, and on the basis of a division of labor. Thus, at the outset, the Soviet method differs from that followed in American schools. In the United States pupils are ordinarily expected to work individually. There are much fewer textbooks used under the Soviet system. There are not even reference books in many of the schools and on many of the subjects. The teachers and pupils together build the courses as they go.

Thus the Soviet method begins with the proposition that the school must work experimentally in all fields. The second proposition is equally important. The problems with which the work is done must be drawn from the normal life of the pupils.

Soviet pupils are therefore expected to look around

them, and to understand what they see. This understanding comes from the application of the principles of scientific research to everyday affairs. "Everything is new with us, and it is not strange that we frequently fail to find in books the answers to questions and the solutions of problems that confront us; our children must seek to create, to propose a problem and to seek its solution through experimentation, thus obtaining the response of life and of nature." (*Programmes Officiels, supra.* p. 54.)

How shall this response of life and nature be determined? Can undeveloped children understand and measure these responses? Are not such matters beyond child ken? Is it possible to provide a course of study that is within the reach of children and that will at the same time preserve their interest through the opportunities that it offers for initiative and for group activity?

Soviet educators have tried to answer these questions by dividing the course of study into a number of small units or concrete points of interest, each one of which is a rounded life experience. One of these points of interest is called a "complex."

Soviet elementary education proceeds on the method of the study of complexes, each of which is "the body of concrete phenomena taken from reality and grouped around a definite idea or theme." (*supra.* p. 13.) In western Europe, this would be called a centre of interest by educators, but under the Soviet interpretation, it is more than a centre of interest. It is a centre of life-activity.

"In school we must study life, reality. This imposes on us a certain method of instruction different from that which has been employed up to the present time. Until now pupils studied different topics without any connection between them; . . . the programmes which we are proposing are not made up of subjects but of complexes." (*supra.* p. 13.) Applied to the first grade of the village school, this organization of material by complexes is as follows: (*supra.* pp. 19-21.)

"First Year—I. Autumn-winter Trimester.

- "1. The life of the child during the summer, before school. Conversations with the children.
 - a. Nature during the summer. The weather. Vegetation. Comparisons with autumn.
 - b. Occupations of the children during the summer; their work and play; the work of their families. Encourage the children to express themselves freely, in their simple child language, giving their observations, etc.
Free hand drawing; representations and models of the themes being discussed. Additions and subtraction within the limits of one and twelve. (For instance, in comparing the composition of the families of pupils, the ages of the youngest in the families, etc.)
Bring together in the school all of the things made by the children during the summer, and other things in a class museum that is connected with the discussion as to what the child did during the summer.
 - c. Study the composition of the child's family.
- "2. Discuss the school and its work.
 - a. In order to decorate the school, have the children collect natural objects (beautiful foliage, mosses, nuts, mushrooms, stones). Changing color of the leaves in autumn. The fall of the leaves. Organize a corner of live vegetation in the class room.
 - b. Why do people come to school? Why are schools being set up all over the world? The school rules.
Take advantage of the ordering of the class room and of its decoration to have the children count,—the furniture, the books, the equipment, etc.
Problems with all of the operations in the limits of one and twelve. Decorative work. Free-hand drawing. Take advantage of posters and signs to have the children begin to read. Hygiene in the cleaning of the building; health rules (open windows, sprinkled floors, etc). The use of the toilet.
 - c. Begin to habituate the children to organization (work, the plan of the day, discipline).
Why is order desirable in the school?
What does each member of the family do at home?
Examine the division and organization of work in the family. Reading and writing; their importance; the intellectual pastimes of the family.
- "3. Safeguarding the health of children.
 - a. Sickness and health.
The diseases of children.
Contagious diseases.
 - b. Measure the height and weight of the children (long measure, weights, the half, the quarter). Profit by the necessity of recording all of these measurements to continue the learning of reading and writing.
Indispensable notions of hygiene: clean face, hands, ears, clothes, normal sitting position.

- c. Protection of the school against contagious diseases. Observations of hygiene in the family of the child.
- "4. The November Revolution.
 - a. Utilize the available natural material for the decoration of the school; profit by these decorations to make observations about nature. (Accustom the children to the care of vegetation; not to break limbs; to care for new growth, etc.
 - b. Organization of the class work for the revolutionary celebration; the work of decoration; reading and writing revolutionary posters; learning revolutionary songs; group movements and discipline (for taking part in the demonstration, in the parade).
 - c. The life of workers (wage-earners and peasants) at present; under the Czar; landowners and capitalists.
- "5. Preparation for winter.
 - a. Signs of the approach of winter; shortening of the days, study of the clock—hour, half-hour, quarter-hour; observations on the changing weather (storm, clouds, sun, rain)—preparation of a simple weather record; observe the flight of the birds, the fall of the leaves, where and how the insects and the animals hibernate.
 - b. (The children help get ready for winter.)
 - c. (Work of the families in getting ready for winter.)"
- 6. The environment in which the child finds himself in winter.
- 7. Summary of the trimester; exposition; fete; report of the work done.

It is unnecessary to go further with the detail. The work suggested under headings 5 and 6 above resembles that already given under numbers 1 to 5.

Two observations are appropriate: (1) If readers will turn to Chapter 2, and will compare the elementary village curriculum of Czarist days with the one just described, they may be able to form some idea of how far the schools of Russia have come in less than a decade. (2) The complex method has been followed with great fidelity; the whole course of study is drawn from the environment of the child; the outline is sufficiently elastic so that pupils and teacher are free, from day to day, to plan out just how the next steps are to be taken.

The plan for the remainder of the year is of the same general character: following nature; following the experiences of the child; following the activities of the family. Through the year, the child is asked to observe nature, himself, and his social surroundings; to analyze them; to discover their meaning. He is using the method of science,

and in addition to working with the world of chemistry and mechanics, he is also turning the cutting edge of scientific investigation against social phenomena.

During my whole stay in the Soviet Union, I did not enter a single elementary school where this program, or some modification of it, was not being tried in the lower years.

With this field of activity in mind, the teacher and the class prepare a "working plan" which the class will follow. Such a sample plan is contained in the *Programmes Officiels*, (pp. 58ff). It is long, and is drawn up under six headings. In order to illustrate its character, I will quote one section:

"Example of working plan for the natural sciences; village school, second year, autumn-winter trimester.

"1. The life of the child during the summer vacation. . . .

"2. Plan for coming work.

a. *General subject.* Organize the work of the class for the trimester; scientific, economic, school organization. Propose the general object; to study the life of vegetation and of domestic animals during the autumn and winter, and the work that they demand. Particular problems: study of a worker and of the conditions of his life during the winter.

In connection with this prepare the work plan for the trimester; study of the forces and of the means of execution; division into groups and tasks for the various activities and observations. Decision as to the way in which reports on group work and on tasks shall be made.

b. *Excursions.* Study of the whole school and of the class. Study of the school grounds and a report on the improvements that should be made in them. If there are no school grounds, make an excursion into the village with the same object.

c. *Work.* Preparation of blanks on which work records are to be kept. Decoration of the class room, and its preparation for the year's work.

d. *Laboratory work and observations.* Harvesting of wheat. Threshing. Compositions written on the work of the fields. The potato harvest.

Elementary notions as to the way of calculating the year's crop.

e. *What the children should read and think.* Reflect on the difference between individual and collective work. Causes of the present harvest. Influences of these causes on our lives."

So much for the first two steps in method: the division of subject matter into complexes and the preparation of a

working plan. Now comes the third step. The teacher and the pupils, under this working plan, must carry on a series of projects.

Each complex, to be of use, must be convertible into a project. A project is an enterprise undertaken by an individual or a group. It may consist of a chemical analysis, or of the sanitary survey of a village.

The type of project that fits best into the Soviet educational program is the group or class project—a piece of work that a number of the pupils can do together, on the basis of a division of labor. In order to carry out such group projects, classes are divided into groups that vary in size with the character of the project. Each of these groups then goes to work on its assigned task. Ordinarily they do their work on a laboratory basis after the third or fourth year of the elementary school.

Thus, in theory as well as in practice, the school becomes an experiment station, in which groups of pupils and teachers are working on problems, and are seeking through the application of scientific method, for an answer. The problems are all of immediate and local interest.

Most Soviet school rooms are not yet equipped with tables and chairs instead of the old-time benches, but the number that are so equipped is growing very rapidly. In the lower grades (the first three or four years) the children work in the same room under the same teacher. In the higher grades they go from one laboratory to another studying some aspect of the complex or unit problem that is occupying them at the time.

There is a fourth stage in Soviet method—the report on work done. A project is not completed until it is carefully written up, and in the Soviet schools, writing up includes diagrams. A diagram is a schematic or pictorial presentation of information. Soviet students reduce the whole field of study to diagrams.

Diagrams begin with the first year. The children diagram heights, weights, family composition. They diagram the organization of the health service, of the Pioneers; of

the student self-government; of the harvest. Diagramming is, of course, an essential part of modern scientific method, and since the introduction of the new education plan, Soviet students have been making diagrams. The result is that when I visited the Soviet schools the ordinary upper-grade student could read a diagram as readily as a trained mechanic reads a blue-print.

Successful diagramming is a relatively new art. It is being worked out in the school rooms all over the Soviet Union.

Methods of work, such as those that I have just been describing, have been tried in a few private and public schools in the United States. They are today being adopted and applied to the needs of millions of children in the Soviet Union. It goes without saying that a plan in so experimental a stage is not universally approved, but it has won the support of the great majority of teachers and educators with whom I talked.

Pupils also seem to like the new plan. It gives them both freedom and variety. They enjoy its elasticity, and the chance that it gives them to co-operate in the building of the course of study.

The greatest objection to the plan really comes from the teachers who are called upon to administer it, without any adequate preparation for subject matter and teaching method that are so utterly different from those that were current in Russia before the Revolution.

What does this plan mean to the teacher? "It means that he must study the work profoundly; that he must learn to see what is going on around him; and to appreciate its significance. Without losing any time he must begin to study this domain—at the beginning as an apprentice—with the pupils; he can learn much from the children; it is only necessary that he should make them talk, and then draw the conclusions and necessary deductions from these observations. But in addition to practical studies in this field in collaboration with his pupils, he must study the same subject individually, profiting by the experience

of humanity, that is, from the book." (Supra. p. 15.) The teacher can understand the book better than the children; he has had more experience; his horizon is larger; instead of asking them to read, at the outset it is he that must read and explain.

No instructor can do this work effectively alone. It must be directed by the local organizations of educational workers, acting in concert.

If the work is well done, the teacher will stimulate among his pupils a wish to learn. He will increase their desire for the understanding of life. "He will direct their instincts of investigation in such a way that he will make them ardent propagandists of science in their families." (*Programmes Officiels*, p. 16.)

IX. ORGANIZATION AMONG THE PUPILS.

Soviet schools are doing important experimental work with subject-matter and method. Probably the most tangible product, to date, of the new program, is the organization of pupils in the schools. Before the Revolution organizations among the pupils were ordinarily forbidden by the state. Today they form an essential part of the educational system. It is through the student organizations that the pupils in the various school grades are learning how to live and work together.

The experimentation with subject matter is confined, largely, to the elementary schools. New methods of instruction have been applied generally in the elementary schools, and to a degree in the higher schools. But the organization of students existed, in some form, in every school that I visited.

Student organizations in the Soviet Union are four chief kinds: (1) Organizations that are designed primarily to carry on student activity, such as sport and publications, to maintain the discipline of the student body, and to give the students a share in the administration of the schools. (2) Organizations of pupils to control and to help direct academic work. (3) The economic organization of pupils, either in co-operatives or in trade unions. (4) Political organization of pupils, either in Pioneer groups or in Young Communist groups. All of these organizations are being built up with the assistance of the school authorities, who are experimenting to discover how far children are able to go in the direction of social activity.

Something has already been said about these different forms of student organization in the chapters dealing with the different grades of schools. Here it is possible only to make a survey of the tendency and to give some indica-

tion of the theory that underlies this branch of Soviet educational activity.

No school that I visited in the Soviet Union was without its student body organization or organizations. In the one or two room village schools, this organization was quite rudimentary—a mere gesture. In the larger village schools it was well under way. In some of the city schools, it had reached an advanced stage of development.

There was no single form of student organization. The plan was general. Its application differed with the differing needs of each locality. Its more important variants were:

1. In the degree to which each class was organized.
2. In the relation between class organization and the organization of the pupils in the entire school.
3. In the closeness with which teachers were expected to watch and to supervise student organization and activity.
4. In the relation between student organization and the actual work of administering the school.
5. Of course the extent and complexity of student organization varied directly with the age and advancement of the pupils. It was negligible in the early elementary grades. In the higher schools it was a determining factor.
6. In the proportion of student representatives to teachers on the various committees and governing boards.

Class organization was more prevalent in lower schools than in higher schools. In the elementary grades, most of the students were organized, first by classes and then as a school. In the higher schools, on the contrary, the trade union group and not the class was the unit of organization. Students were organized first in their student unions and then as a school.

The simplest form of class organization consisted in the election of a secretary or of a small executive com-

mittee, to take the roll, to keep order, and to tidy up the room. The next stage involved the appointment or the election of a number of sub-committees, each with a special task to perform. A still more complicated form of class organization consisted of the division of each class into a number of sub-groups of six or eight or ten pupils, and the joint work of these sub-groups. This last plan I saw worked out in one of the schools in the Donetz Coal Basin.

Children of eight to ten years were divided into groups of six. A class of 30 children would thus contain five groups. From 11 to 15 years, the pupils were grouped in tens. Among the younger pupils, each group of six selected a leader, and these leaders made up the class executive committee. Among the older pupils, however, each group selected three of their number: (1) was a member of the class executive committee; (2) was a member of the class culture committee; (3) was a member of the class sanitary committee. This method provided three committees of three members, but all elected in small groups.

Generally the student executive committee was charged with the handling of discipline and with the supervision of class affairs. The culture committee secured and distributed reading matter and was responsible for the publication of a wall newspaper, when one existed. The sanitary committee was sometimes charged with the duty of keeping the room clean, sometimes with the duty of seeing that the pupils kept clean, and sometimes with both tasks. In this Donetz Basin school, the sanitary committee was expected to keep both school room and pupils in sanitary repair.

Student organization throughout an entire school ordinarily involved either the calling of the whole student body together, and the election of executive officers; the election of delegates, from each class, to a delegate body charged with the duty of selecting an executive, or the election, by each class, of a member or members who, in the aggregate would make up the school executive organiza-

tion. The elections were usually held quite frequently to give the pupils a chance to modify their decisions.

Once constituted, the executive committee divided itself into a number of sub-committees and very frequently drafted other students qualified to serve on these sub-committees. The committees most generally met with dealt with sanitation; with the supplying of the economic needs of the students; with culture—the school wall newspaper, the reading-room, the library; with the portion of school work to be done by the students; with the management of the student club and club-rooms. Occasionally there were other committees appointed, particularly in the higher schools where there were special needs. Either the class executive committee or the executive committee of the whole school dealt with discipline.

Control of these student committees and subcommittees was ordinarily in the hands of the students. Occasionally teachers were appointed to supervise committee work, but this was exceptional. In all cases, the school administration kept in touch with the student activities in the same sense that they kept in touch with the progress that the students made in any of the problems that they were studying. Self-government is a part of the course of study, and as such it comes under the observation of the school authorities.

I talked with one boy who was a member of the student executive committee in a factory school. The entire student body, in that school, met and selected an executive of twelve members. The executive appointed: a sanitary committee that had charge of personal, school and home hygiene; an industrial committee that supervised the conditions under which the students worked in the factory; an editor for the wall newspaper of the school, and a committee on the conditions of student life. Some of these sub-committee members were members of the executive and some were not.

"What would you do if a boy smoked in class while the teacher was away?" I asked.

"That is against the rules of the school," the lad replied. "He would be told by the class monitor to behave himself."

"Suppose he refused to stop smoking when he was told to?"

"Then the case would go to the student executive committee."

"But suppose he still smoked in class?"

My informant seemed a bit put out. "We never have such a case," he said, "but I suppose that if we did we would take the matter up with the Pioneers, if he belonged to them, or to the Young Communists, if he belonged to them. We might also take it up with the Factory Committee. We certainly would not let the matter pass. There is no such thing as a school without discipline."

Interestingly enough, this lad never even suggested the possibility of beating up the delinquent. His whole method of discipline consisted in bringing social pressure to bear on the offender.

This system of organized social disapprobation is relied upon quite generally by the students. It seems to be wonderfully effective. So far as I could learn, physical punishment is quite rare. I did not find a single case where it was used or even suggested, although the student leaders with whom I talked all declared their chief problem to be that of discipline.

School boards or committees are divided into two general classes: school committees or councils, having general control over the affairs of a school, and consisting of a relatively large number of representatives from teachers, students, technical workers, parents, trade unions, and political organizations. The second class consists of small school executive boards, usually from five to seven members. The general school committee meets rarely—once a month or once in three months. The executive board meets frequently. In every school that I saw, the students were represented both on the general committee and on the executive committee.

Technical workers (janitors, clerks, and helpers about the schools) were almost always represented on the general committee and rarely on the executive committee. Trade union representatives were almost always on the general committees and almost never on the smaller executive committee. Parents were frequently represented on the general committee, but seldom on the executive committee. Political representatives (Communists, Young Communists) were almost invariably on the general committee and almost never on the executive committee.

Literally, therefore, there was not a single school that I visited in the Soviet Union in which the students did not take part in the management and administration of the institution. Practically always it was a minor part. In the lower schools it was probably more or less formal in a great many instances, depending, of course, on the personalities at the head of school and of student affairs. But in person, if not in influence, students were always on the governing boards.

Student participation in the direct control of academic work was largely confined to the higher schools. The elementary teacher was expected, at all stages in the development of the work, to talk over the plans with the children. In the lower grades, particularly, the range of choice left to the children must be quite small. The formal organization of student participation in the control of academic work began in the factory schools and in the later years of the other professional or high schools, when the students are 15, 16 or 17 years of age. In the higher technical schools some form of the subject commission was in very general use—a series of committees, one for each chief division of academic work, on which faculty members and students (usually in the proportion of two or three to one) determined the character of academic work and supervised its execution. In all of the higher schools that I visited, the students played an active role in the control of academic work.

Economic organization of students existed from the

lowest grades. There the organization took the form of tiny co-operatives established by the students, with the aid of the teachers, for the purchase of the supplies that the children needed. In the professional and higher technical schools the students have organized co-operatives for many different purposes. They have also quite generally organized trade union groups, which are made the basic unit for student organization in the higher technical schools.

Student members of trade unions usually pay one per cent of their income as dues. In the case of many students in the higher technical schools, a part or all of this income is provided by the union,—still the principle of dues payment is established. Students have joined the union, and are working and thinking in terms of trade union activities before they leave school.

Many of the students in the Soviet schools are organized politically. A few of them are members of the Communist Party. Among the older students, a large number belong to the Young Communist organization. Younger students are organized into Pioneer groups. While the Pioneers is not in any sense a political organization, it is under the direct control of the Communists and Young Communists.

The organizations of Pioneers are not unlike the Scouts in their emphasis on clean living, exercise, out of door activities, social obligations. There the likeness ends. The chief object of the Pioneers is political and social education. The leaders of the Pioneers are seeking to develop a revolutionary spirit in their charges, and to train boys and girls who will play a part in building a Communist society.

Educators in the Soviet Union are studying student organization just as they study any other problem in pedagogy. Zaloojny, Director of Pedagogical Research in the Kharkov Department of Education, described the experimental and research work that they were doing in this field:

“Child study has been shifted from the child as an in-

dividual, to the child as a member of a social group," he said. "This necessitates a complete change in the approach to the child problem.

"Under our system of pedagogical research, a normal child is one who is successful in group life. Any child who functions well in a group we classify as normal. All other children we classify and treat as abnormal.

"The normal child is therefore studied under the general heading of 'social psychology' or the psychology of social beings, acting in groups. The other children are studied under the heading of individual psychology, or, as we are now calling it, 'reflexology.' This corresponds with the field that you describe as 'physiological psychology.'"

Zaloojny then took me to one of the pedagogical laboratories in which reflexology was being studied. There were four of these laboratories in the Ukraine. A few of the experiments were being made with animals. Most of them were carried on with some group of sub-normal children—feeble-minded, deaf-mutes, blind, and other children who were "incapable of normal group life." The experiments consisted in stimulation with light, with sounds of various kinds, with food and with electricity. The effects on the actions and on the secretions were noted and tabulated.

The real work of pedagogical research in the Ukraine is not being done in these reflexology laboratories, but in the study of child associations. A detailed investigation is being made of the associations which children form in their games, their school classes, etc. Teachers are expected to stimulate and direct the desire for group organization in the same sense that they are expected to stimulate and direct the child's interest in science.

When I was in Kharkov a questionnaire had been distributed, and about 800 children's groups were under observation. As a result of their study, to date, they had slightly modified MacDougall's classification (their point of departure) and were working with the following five forms of child collectives:

1. Brief collectives, organized usually before school age, and for the purpose of play. Of very short duration.
2. Self-organized collectives, more or less permanent. Usually organized to carry out a project of common interest to the group,—to build a house, make a raft.
3. Temporary collectives, but, for the period of their duration, developing a system of social machinery,—the club or meeting, with its officers and rules of procedure.
4. A permanently organized simple collective, having in view some specific purpose. A literary society.
5. A permanent complex organization for general social purposes. A student social club or fraternity.

The questionnaire called for the study of four sets of facts regarding each of these collectives:

1. The social background of the children; homes from which they come; school life; general social experience.
2. Situation under which the organization arose.
3. Stimulus that brought it into being:
 - a. Stimulus from inside the group of children.
 - b. Stimulus from outside the group.
4. Reactions (results) of the operations of the collective. Duration; reactions on the group life; development of other collectives.

"Have you found any standardized type of organization among the school children?" I asked.

"Not as yet," Zaloojny replied. "That is just the point we are trying to settle. We want to find out whether there is not some form of organization that is peculiarly suited to the needs of each group of children. As we discover the most workable types, we shall try to have them adopted."

"Will these forms of organization be adopted voluntarily by the children in all of the elementary schools?"

"By some groups, yes, of course. They already have

their types of organization with which they are experimenting. Among the more backward children, and especially in the smaller villages, the organizations, will, of necessity, be introduced and encouraged by the teachers."

One fact had already been generally observed: the children tended to make their organizations more complex and elaborate than the needs of the piece of work in hand required. Some of the children had learned this by experience and were going back to simpler forms. In the future, such mistakes could be avoided by pointing out the results of past experience to the children.

The general idea underlying this effort to establish organizations among the school children was stated by Krupskaya in her message to the Young Pioneers: "Normal children, living under normal conditions, seek to organize themselves. . . . A definite objective, a collective life are the essential conditions for the development of children." (From a multigraphed copy distributed by the Education Workers' Union of the Soviet Union.)

The educational principles behind student organization were thus stated by the Scientific Pedagogical Section of the Russian Republic State Council of Education:

"1. The bourgeoisie places before the school, as objective: raising a citizen who is docile, and little disposed to change the essential forms of the established order. This object determines the character of the work and the internal structure of the school. . . .

"In such a school the instructor plays the part of an absolute master over the class and over the students. A system of punishments and other devices are added,—among them rewards, that are aimed to assist the instructor to reach the desired end. The children are at his mercy. He may double the tasks; he may send children from the class; in him the children see the enemy that must be fought. They struggle against his rules, violate them deliberately, form groups for this purpose. The teacher is the representative of state power, and in fighting against him, the pupils are fighting against the orders of the

state. Such a struggle unifies large groups of students, weakens the prestige of the authorities, interferes with the realization of the educational objective, arouses a spirit of discontent, intensifies the hostility.

"The introduction of student autonomy in such a school has for its object the elimination of the struggle between teachers and students, to raise the prestige of the teacher, to place upon the children themselves the duty of surveillance, the execution of the teacher's decisions, which is merely a means of subjugating the pupils to the teacher. . . .

"2. In countries where bourgeois democratic republics are solidly established—America, Switzerland—one frequently finds in the schools an autonomy of another type. All at once or gradually, there is introduced into the school a constitution like that of the bourgeois democratic republic, with all of its attributes: elections, courts, even prisons (see, for example, the George Junior Republic in America). Pupils, particularly adolescents, enjoy a certain liberty of action under this constitution. Such student autonomy has for its object to raise citizens devoted to the bourgeois republic.

"3. The difference which exists between the objects that we propose for the school and those that the bourgeois state proposes, exercise a decisive influence on the form and the object of student autonomy.

"4. The object of our school is this: to raise a useful member of human society, joyous, vigorous and able to work, alive with social instincts, accustomed to organized activity, understanding his place in nature and in society, knowing how to relate himself to the march of events, a firm defender of the ideals of the working class, an able constructor of communist society.

"5. In our schools, self-government is not a means of governing the students more readily, neither is it a practical method for studying the workings of the constitution. It is a means by which the pupils may learn to live and to work intelligently.

"6. The richer the content of student life, the more thorough will be the student autonomy. Collective work is, par excellence, the great organizing force. Self-government cannot develop well, and take on the most rational and most helpful forms except in a school where collective work represents the vital nerve of the whole student life.

"9. Under its developed forms student self-government must include the union of educational groups and social activity which in effect embraces the economic, recreational and artistic work of the students, as well as student mutual aid. The students must in all cases be represented on school committees.

"10. The whole work of self-government must be handled by the pupils in co-operation with the teachers. The duty of the teacher consists in actively contributing to student autonomy. However, he will leave the scholars completely independent and will try not to let his authority weigh upon them." (From a multigraphed copy of the official order, distributed by the Education Workers' Union of the Soviet Union.)

Judging by what I saw in the schools, I should say that this general principle of student self-government was being carried out with reasonable fidelity by the local educational authorities. It is an educational principle of the highest importance, introduced for the first time on a large scale in a public educational system. Students are to be taught to work in groups, not so that the teacher will have an easier time, but in order that the students may have the social education that comes with group activity. Among all of the experiments that the Soviet educators are carrying on, this promises to constitute the most drastic departure from the educational system that exists in other countries.

X. THE ORGANIZATION OF EDUCATIONAL WORKERS.

Experiments with student organization probably constitutes one of the most important contributions of the Soviet educational system. Of almost equal interest are the experiments that are now being made with the organization of education workers in the Soviet Union.

Educational workers, like all other workers in the Soviet Union are organized into trade unions. Unlike the teachers' trade unions elsewhere, however, these unions include all workers in educational institutions. This is the principle of industrial unionism applied to the educational field.

Older trade unions were organized by crafts: carpenters in one union, bricklayers in a second and stone-masons in a third. This form of organization exists in most of the great industrial centres of the world at the present time, and it was the logical product of a stage in the development in industrial society when each craft was organized by itself. Business consolidations have replaced the old craft organization of industry. Since the Russian unions were all organized in the period since 1905, they never went through the stage of craft organization, but started on an industrial basis when the Revolution cleared the ground for them in 1917. There were 23 unions organized in all, and one of them was the union of education workers.

According to the industrial principle, an entire plant or productive unit must be organized together. If it is producing coal, all of the workers in and about the plant belong to the miners' organization. If it is a steel plant, all of the workers belong to the metallists. That same principle has been applied to education, and with a few

minor exceptions, all workers in educational institutions belong to the Education Workers' Union.

Here are the figures showing the composition of a typical section of the Education Workers' Union. They cover the North Caucasus Region, and are for September, 1925. In this entire region all but about 1.5 per cent of the education workers were in the union. Most of the non-unionized element was in the villages:

<i>Occupations</i>	<i>Number</i>	<i>Per Cent of Total</i>
Teachers in Schools.....	16,485	41.3
University Professors.....	691	1.8
Teachers in Children's Homes.....	4,558	11.4
Janitors, Etc.	8,203	20.6
Office Workers in Schools.....	2,140	5.3
Library Workers and Workers in Village Clubs	3,334	8.3
Communist Party Office Workers.....	1,741	4.3
Student Members	1,873	4.7
Press Workers	895	2.3
Total	39,920	100.0

Only a little more than half of the North Caucasus Education Workers were teachers. The remainder of the union members were occupied in and about educational institutions, but not in a teaching capacity. All of the members of the union were a part of the personnel of the educational system.

Soviet education workers were variously organized. In the Ukraine, for example, where there were 101,363 members in the union on January 1, 1925, there were four series of organizations: the smallest was the village; the next was the raion, which corresponds roughly to an American township; the third division was the okrug, which resembles an American county, and the final organization was that of the Ukrainian Republic. The same type of organization existed all over the Soviet Union.

Where there were less than ten education workers in a

village, they were expected to elect a secretary. Where there were more than ten, they elected a committee of three. The secretaries of the smaller groups and the committees of the larger groups were responsible for the establishment and maintenance of culture centres in their local communities.

Each village group elected delegates who formed the members of the raion group. The raion groups elected delegates who formed the members of the okrug group. The okrug groups elected delegates who formed the Education Workers' Congress of the Ukrainian Republic. This congress, meeting once a year, elected delegates to the Education Workers' Congress of the Soviet Union. Practically the organization was strong in the larger centres, and was weak in the villages, unless there happened to be one or more strong teachers in charge of the local schools. Theoretically the organization was very complete.

Officers of the Ukrainian Education Workers' Union had some interesting figures regarding their 101,363 members. Of this total, 60.6 per cent were teachers in the elementary schools; 8.6 per cent were teachers in professional schools; 5.1 per cent were teachers of political education. Technical workers in the schools—janitors, clerks, etc., made up 18.3 per cent of the entire union membership.

For the Soviet Union the number of educational workers who were in the union on April 1, 1925 was 583,811. On the same date in 1923 the union had 383,645 members, and in 1924, 516,818 members. About four-fifths of these members were men. Elementary teachers were 45 per cent of the total membership for the Soviet Union. Teachers in professional schools were 2.8 per cent; in higher technical schools and universities, 4.8 per cent; and in pre-school classes, schools for backward children and other educational institutions, 6.1 per cent. Administrative and technical workers in the schools were 23.4 per cent of the total.

The Education Workers' Union had two main functions: to protect its members through their collective agreements, and to raise their professional and cultural standards; (2) to raise the cultural level of their communities by raising standards of education and improving social organization.

The union signed a collective agreement with whatever department paid the salaries of the educational workers. The workers in an institution under the control of the local educational authorities in Baku signed an agreement with these local authorities. Workers in national museums signed an agreement with the department of the Soviet Union Government that handled museums. In all of these agreements provisions were made for the wages, the conditions of employment and the handling of grievances. All such collective agreements made locally were subject to review by the central committee of the Soviet Educational Workers' Union. While they were not uniform in detail, they followed out the same general principles.

Education workers maintained a club in each of the chief centres. These clubs, like the clubs maintained by the other labor unions, housed the cultural work and the social activities of the union. The building occupied by the Education Workers' Club at Kharkov was formerly the house of one of the rich merchants of the city. During the Revolution this house was taken over by the city, and in July, 1925, it was placed at the disposal of the union. The union spent about ten thousand rubles in repairing and refitting the house, for which they do not pay any rent. It was fully equipped for club purposes when I visited the city.

The club was in charge of a committee of the local union. This committee selected a manager who spent all of his time at the club and was paid for his work. In the main lecture hall, which seated perhaps three hundred, there was a lecture every evening except Saturday, which was reserved for social events. The night that I visited the club a professor from the University was delivering

a lecture in a course on pedagogy. Various subjects were handled on different nights. An attempt was made, in planning the program, to keep all of the work definitely educational.

In another room there was a special library for the janitors and care-takers of the schools. A committee of technical workers was meeting in this room. The main library of the club, devoted largely to education, contained 11,000 volumes. There was a reading room in connection with this library where the leading educational papers were on file. The Young Communist Group of the Educational Workers' Union was meeting in another room. Still other rooms were occupied by class and committee meetings. There was a dining room and a large social room.

At the Rostov education workers' club they varied this program by having one evening a month devoted to "question and answer." On this evening the members of the union executive committee all sat on the platform, and the members of the union held the floor and asked questions. It was generally the liveliest meeting of the month.

In all of the clubs that I visited there were excellent wall newspapers, written (or typed) for the most part by the younger members of the organization. It is worth while noting that a great deal of the educational work of the Soviet Union was being carried on by people under 25, and much of it by people under 20.

The Rostov Club had 2,015 members. The dues were less than 25 cents per month, varying with the salary.

Such plants were very expensive to keep up. Their existence was made possible by the "culture funds" that were at the disposal of the unions. In the North Caucasus, the collective agreement required the school authorities to pay into the union treasury, for cultural purposes, one per cent of the amount of the total salary budget. The union was of course bound to use these funds for culture work.

The Education Workers' Union did not control the appointment of teachers nor did it determine the course

of study, but it generally had its representatives on the committees that were carrying on this work. In this respect, the education workers are in the same position as the other workers in the Soviet Union. Nowhere do they control production. But everywhere they have a voice in determining the conditions under which the workers carry on productive activity, and everywhere they have a veto over the hiring and the discharge of workers.

In the case of the education workers, as elsewhere, the practical method of protecting themselves was the insertion in the collective agreement of a clause providing that in the filling of positions the school authorities should give union teachers the preference over non-union teachers. So long as the union can provide competent union members, it can virtually control the labor market.

In the smaller communities the teachers were expected to be the leaders of local cultural and social activity. They were to occupy the position of "the central public figure in the village" and were to become "the close advisers and helpers of the peasants." When this result has been achieved, science and the school will dominate village life. "This will not merely be the victory of the teachers over the priests, but the victory of the Communists over the stagnation, backwardness and prejudices of the village." This means that the teacher will be the cultural leader of the rural masses.

Soviet educational organization and Soviet pedagogy all are aimed in this direction. Practically, the teachers are expected to carry out the plan by taking an active part in the organization of village-houses, reading-rooms, libraries, entertainments, lecture courses, and the like. The rural teacher thus becomes far more than an instructor of children. He is a general adviser and organizer of the social and cultural side of village life.

Through such methods the Soviet authorities expect to break down the wall of backwardness that surrounds the village. The older generation is being taught to read and write. The younger folks are being taught, in the schools and in the community, to organize life on a new basis. As

these plans mature, the Education Workers' Union will play a larger and larger part in the rural cultural life of the Soviet Union.

As yet it is too early to judge what effect this widespread organization of the education workers will have upon the education workers themselves. There is no country in the world where teachers, for example, are as completely organized as they are in the Soviet Union. As students in the normal schools and teachers' colleges they are student members of the union. They secure their positions in educational institutions because of their union membership. All of them are united, locally and nationally, and they are expected, as members of the union, to work out certain very important cultural activities in the communities where they teach.

Furthermore, as in no other country in the world, the workers in educational fields other than the schools, are brought together in the same organization. Press workers, workers in libraries and museums, and workers in technical research are all members of the same educational body. They meet and function together as a part of the educational machine.

Again, through the industrial union principle, all of the workers in educational institutions, whether they teach or wash floors, are a part of the same general occupational field, and therefore belong in the same union. This establishes a sense of solidarity in the ranks of all those who are connected with educational work, no matter what may be the capacity in which they function.

Years must pass before it is apparent just what effects such drastic departures from the academic tradition of "professional standing" will have upon the tone of the work done by Soviet educators. Certainly, if there is anything in the principle of organization, it will have a rare opportunity to show itself among the education workers of the Soviet Union. They are thoroughly organized themselves, and they are an organic part of the society in which they are carrying on their activity.

XI. HIGHER EDUCATION FOR WORKERS.

Education in western Europe existed, in the early days, for the priests, and for some of the retainers of the nobility. The merchant class received a little school training. Later the sons, and finally the daughters of the upper classes were given educational advantages, but it was not until the opening years of the nineteenth century that education was offered to the masses of the people. Even then they did not receive much education—reading, writing and a little arithmetic and distorted history.

Mass education was provided for two main reasons: first because the introduction of machine production had created a demand for skilled workers that the industries themselves could not meet; second because the workers, as they began to formulate their demands for emancipation, discovered that one of the first requisites for the success of their movement was education. All through the last century, therefore, the trade unions of industrial countries were pressing the demand that more effective educational opportunities should be open to the children of the workers.

In some countries, that were less developed industrially—Russia, for example—this education was given grudgingly. Even where the sons and daughters of the workers were permitted to enter the higher schools, they were admitted in such tiny proportions, as compared with the great masses excluded, that for all practical purposes, the masses were excluded.

In other countries the exclusion took a less offensive and a far more practical form. The costs of higher education were heavy. In England, for example, a worker, if he put his whole yearly surplus into the project could not send a son through the higher schools. Gentlemen, who had more money, could send their sons without any

trouble. The consequence was that, even up to the present time, the majority of those who go to the English Universities were the sons of the landed aristocracy, the successful merchants and bankers and the more fortunate professional people. This process of selection for the student body of the higher schools was carried on without any great reference to merit. A worker's son went into the factory because he was the son of a worker, while an earl's son or a banker's son went to the university because of the social and economic position occupied by his parents.

Again a practical consideration arose. There were poor boys, bright poor boys,—the sons of clergymen and teachers,—who showed great promise. They were given scholarships because the members of the ruling class realized that they needed additional brains to direct public affairs. Occasionally there was some workingman's son who, by sheer grit and energy and ability, scaled the wall of higher education. Of course such cases were rare, but they showed that there were workingmen's sons with brains.

By the time higher education was well organized in the United States (late in the last century) this was taken for granted, and the technical schools offered free scholarships and fellowships for the abler among the poor students. This did not equalize the disproportion between the son of a rich man and the son of a worker. The worker's son went to college because he had energy and ability. The rich man's son went to college because his father had money. Colleges were still filled with the children of the well-to-do, but there was sufficient leeway so that the brainy poor boy or girl could get a higher education.

The circumstances under which this higher education was secured—surrounded by the children of the rich, and dominated by their ideals and standards—made it almost inevitable that the children of the poor, if they did get through the higher schools, would come out steeped in the ideology of the ruling classes. The higher schools

were therefore an effective means of persuading the abler among the children of the workers that their wisest move was to become members of the ruling classes, or at least to act as assistants and employes of the ruling class.

The higher schools remained under the control of the ruling class, whose members sat upon the boards and committees of the colleges and universities, directed their policy with scrupulous care, and watched over the members of the teaching force, picking them with an eye to their usefulness. Occasionally, despite this care, some liberal or radical slipped in among the members of the teaching body. Where he could be disposed of by promotion and a higher salary, he was handled in that way. Otherwise, if he persisted in his heresies, he was dismissed on one pretext or another.

There were universities in Europe that became the centres of revolutionary activity. For the most part, however, the higher schools were safely conservative, and were wholly in the hands of the established order.

When the Revolution occurred in Russia the universities were generally conservative. There were radical professors here and there, and many radicals among the students, but the bulk of the teachers were safe and sane. In a very real sense, therefore, after the Revolution occurred, the higher schools were still the seat of reaction and of counter-revolution. As lately as 1925 I visited one of the older higher technical schools in which there was not a single Communist on the faculty outside of the departments of social science.

One higher technical school, devoted to agriculture and engineering, had a student body in 1910-11 made up as follows: sons of military and industrial leaders, one-fifth; sons of nobility, one-fifth; sons of the trades-people, one-fifth; sons of ministers, one-fifth; sons of peasants, one-fifth. There were practically no children of the wage-earners in the institution. I secured these figures from a man who had been on the faculty for many years, and who was not a Communist. At the present time the stu-

dent body of this institution is made up almost entirely of the sons and daughters of peasants and workers.

The higher technical school at Stalinov reports that 95 per cent of its student body consists of the children of wage-earners and peasants. Other higher schools report a similar proportion.

Within a few years the higher schools of the Soviet Union have been transformed from centres of capitalist culture into centres of working-class culture, in so far as the make up of the student body is concerned. The teaching body is still largely non-working class in its origin.

Soviet higher education is to-day for the children of peasants and workers just what capitalist higher education, in most capitalist countries, is for the children of manufacturers and bankers. (I talked with one school principal in Germany who told me that in 1925, a child required about 150 marks per year minimum, beside his clothes and keep, to go through a middle school (high school), and about 600 marks per year, minimum, to go through a university. At that time skilled workers in Germany were receiving from 30 marks per week and up, and requiring practically all of it to buy the barest necessities for the family).

How have the Soviet educators brought about this result? By two simple methods: (1) Where there is a choice between the child of a worker or peasant and the child of a profiteer, the former always has the decision. Places in the Soviet higher schools have been too few to meet the demand. Workers' children have gone in and the children of business and professional people have stayed out. (2) By making it economically hard for the children of profiteers to go to higher schools, and economically easy for the children of workers and peasants to go to higher schools.

Even in the lower schools, the children of the well-to-do must pay. The children of the workers go to the lower schools free. But in the higher schools, the children of the well-to-do must pay, while the children of workers

and peasants get their tuition, board and rooms free, and in many cases have a small monthly stipend beside.

At the inception of this policy, the labor unions gave a great deal of support for workers and for the children of workers, in order that they might get to school. The rabfacs were handled for a time largely on this basis. But at present the policy has been adopted by the governmental authorities and they provide a large share of the support.

Students who are children of the workers and peasants do not receive much for going to the higher schools, but with their tuition and living supplied, their stipend is sufficient to enable them to get through school without calling on their parents for assistance. This is the intent of the policy.

Theoretically the basis of these stipends is the merit of the recipient. He is selected by his union, or by the village Soviet, or by some other labor group, as a promising man; or else he enters school in competition with other aspirants for the educational opportunity. There will be many mistakes made, in this process, and favoritism will be shown, but with the authorities that do the selecting so numerous and so local that they know each applicant personally, there is little chance for the development of a selecting bureaucracy, and there seems to be every likelihood that able students will have a better chance to obtain an education in the Soviet Union than in any other large country of the world. Certainly a student who shows ability under the Soviet system can hardly fail to obtain as much education as he can absorb. Incidentally, that education is developed, under the Soviet system, as thoroughly in the field of music and art as it is in the field of science.

XII. UNIFYING EDUCATION.

Soviet education has one dominant aim—to enlarge the life experience of the people. Since the vast majority of the people in any modern community are workers, it is upon the lives of the workers that the Soviet authorities are concentrating their educational efforts.

There are three other propositions subordinate to this main proposition: (1) Education must be primarily for children. The child is the educational objective, not the school system. (2) Socially education must prepare the child to function in his present environment, and at the same time to improve it. (3) It must enlarge the vision of life by opening to children the whole field of human culture.

Krupskaya, Chairman of the Section of Scientific Pedagogy in the State Scientific Council of the Russian Republic, puts the proposition in this way: "The new school proposes to serve the great cause of the workers in training the younger generation, in forming men that are fit for life and for collective work."

Schools must be run for the children. That is their sole cause for existence. Adults must realize this, and if they fail to do so, the children must insist upon their rights.

This is the substance of the message which Krupskaya sent to the Pioneers. "The Pioneer movement produces in the soul of the child a consciousness of human dignity. 'We are not slaves, we are free citizens,' declare the Young Pioneers. In the schools where there are Pioneers, they will not permit punishments; nor will they allow the children to be injured, or even spoken to roughly. That is past. When teachers persist in treating children roughly, the Pioneers will wage relentless war on them (*feront une guerre acharnée*). This struggle is necessary,

and it will assist in the construction of the new school, in which the only possible relations between pupils and teachers will be fraternal ones."

Each part of the program must be explained.

"If the child asks: 'why is it necessary to study this or that?' he must not be answered in the old way: 'that is not your affair; study your lessons without asking questions; your elders know better than you do what must be learned.' On the contrary, he must be told in careful detail, why these things must be studied, and the explanation must satisfy the child. Only in this way can the school be tied up with life." (Quotations from a statement prepared by Krupskaya for the Pioneers, and distributed by the Education Workers' Union.)

These are bold words. Socially they involve an appeal to the children to revolt openly against what they regard as unfair treatment in the school. Educationally they require every teacher to work in harmony with the pupils, and to make the course of study meet their experiences and their interests.

Dealing with the second point,—the necessity of relating what the child is doing in the school to those things which are a part of the child environment, Lunacharskey, People's Commissar for Education, writes: "The program of the lower classes begins with matters that may be made the object of simple discussions with the child: the seasons, the conditions that form the daily surroundings of the child, the group that surrounds him, simple notions of the family in which he lives, and of the society of which he is a part. The next year he begins to understand the atmosphere of work in his neighborhood; he receives ideas on the village and the city; thus enlarging the horizon of what he knows concerning his milieu. Leaving the circle of phenomena directly perceptible to his child understanding, he turns to analyze nature: what is air, water, etc. The constituent elements are appraised, and simultaneously the conception of them is raised. The village is taken, not only as the common working unit, but in its

formation as a social historic unit. Then they study the neighboring country, the province, and finally the whole nation. Each time the ideas are more abstract, more profound, and in connection with the working process there emerges the idea of social organization." (Quotations from statements issued by the Education Workers' Union, summer of 1925.)

Concerning the third point, the broadening horizon that comes with education, Lunacharsky is equally emphatic: "Science is the surest path to Communism, and it is at the same time its principal end. A political revolution has no value, and from it there does not arise human well-being. But well-being itself remains an absurdity, something that does not distinguish men from animals, if it does not lead to a broadening of the intellectual, artistic and emotional life; if it does not augment the happiness that life gives to man in order that he may give it to his fellows. The finest conquest of Communism will be a renaissance of art and of the sciences—this is the most sublime objective of human evolution. Marx told us that the only goal worthy of humanity is the greatest possible enlargement of all human faculties."

These sayings are quoted from men and women in Moscow. That does not mean that the ideas are localized or isolated in Moscow. They existed wherever I talked with school people. They are not the ideas of any one man or woman. They are the conclusions that have been forced upon the educational authorities in a workers' state after years of careful testing and experiment.

"We started with the American school methods immediately after the Revolution, but they did not meet our needs," said Davidovitch N. Horolsky, Director of the Transport Workers' Educational Department of the North Caucasus. "We have been forced by circumstances to build our own educational system. At the present time we are experimenting with various means that are aimed to make our schools productive and creative. It is in the schools that the children must learn how to live, and they must learn by living."

Then he told of the struggle they had gone through to adapt the methods and the educational ideas imported from western capitalist countries to the new educational system that the workers were trying to build. At the beginning of the movement, the trade unions of the North Caucasus carried a great deal of the burden. As life returned to normal, after the famine and the Civil War, this burden was shifted to the state. "Russia is still poor economically, but she is making progress fast. Before the Revolution she was poor and ignorant. Now she is poor and determined."

With great zeal Davidovitch described the work that was being done toward the social education of the children. "In the schools the children are facing and working out their own collective problems," he said. "In all of our schools, the students work in groups. The Young Pioneers are an excellent example of the kind of social education we are giving.

"The Pioneers are making a new generation. They are interested in the world. They know it and understand it. They work. Many of them are spending from two to four hours a day at some useful occupation. This is a part of their Pioneer training. They are organized. They are disciplined in group activity. They obey their chosen leaders. They will make a great generation of workers."

This man held a position under the trade unions. He was directing social education. He had been first a worker, and then for years a teacher. He was not repeating phrases that he had read in a book or heard in a speech. His ideas had been hammered out through eight hard years of educational experience under bitterly adverse conditions.

Among all of the educators that I spoke with in the Soviet Union, none had a clearer vision of the tasks before the schools than Jean Riappo, Vice-commissar of Public Instruction and President of the Directing Committee of Scientific Institutions in the Ukraine. Through the Civil War Riappo had held positions of high military authority

on one front after another. As soon as the Civil War ended, he went to what he calls the "educational front," and there he has been ever since.

My contact with Riappo was typical of the experiences that one has in the Soviet Union. I went to his office on Friday, accompanied by an official of the Kharkov Department of Education. Friday is "student day" in that office. From all parts of the city, and from the surrounding region they come, crowding into the office from nine in the morning until three in the afternoon. Other business waits. We were "other business," so we waited.

The anteroom was thronged with students. Some of them wore the conventional dress of the town. Others wore peasant clothes. There was one figure that stood out among the rest—a big, blond lad of eighteen or nineteen dressed in a goat-skin hat, a long leather shepherd coat and high leather boots. He was part of a delegation of students that had come to Kharkov from their mountain home with a request for improved school facilities in their home community.

The students were admitted to Riappo's office one at a time, unless they were members of a delegation. Some stayed a minute and some stayed ten. Each one put his case and got his answer.

There was pressing public business. The local legislature was in session; school appropriations were up for consideration, but it was Friday, and there Riappo sat all day, talking with students. On Saturday Riappo went before the legislature with his report and his request for appropriations. Other public business was transacted, but on Friday students were "public business."

I heard some criticism from educational officials of this practice of receiving students and letting public business wait. Said one man: "These students are a nuisance. They are under our feet wherever we go. How can we get anything done with them around?"

The answer was simple and conclusive: "We are not running these schools to 'get anything done.' We are running them for the students—to meet their needs. The

least we can do is to put aside one day a week, listen to their requests, and hear their suggestions. They come here in all seriousness to put their cases before us. What is more important than to give them a chance to have their say?"

After the students were through, I had my opportunity to speak with Riappo. He gave me more than two hours.

Riappo had just completed a third book on the educational problems before the people of the Ukraine. The data were at his finger-tips. He had organized his ideas and his material as he organized his armies. The first thing he did, when I sat down, was to ask his secretary for a large piece of paper. On this he drew the plan of his educational campaign, sketching in the details as he went.

"There are three important sectors on the educational front," he began. "They are the schools, the press and the films. The theatres, libraries, museums and the like have to be considered, of course, but for the moment they are less strategically important than the other three.

"Two principal tasks confront us in our campaign: the education of children who are of school age, and the education of adults who are at work.

Riappo then turned his attention to the "school sector" and drew on his paper a diagram in four parts, with the following headings:

"I. Pre-school education; ages 3--8.

"II. The mass school; ages 8 to 18 or 19.

1. Social education; ages 8 to 15. The 'seven year school,' divided into:

a. A first division; ages 8 to 12, during which the child learns his environment.

b. A second division: ages 12 to 15, during which the child receives a general training in the main subjects that are included in human knowledge.

2. The professional schools; ages 15 to 18 or 19. With these are included factory schools, and other technical schools of high school grade.

"III. Schools for specialists--the officers of the new economic and social order. Higher technical schools of all kinds.

"IV. Institute, where the generals and directors of the new social order receive their training."

Then, point by point, he outlined the detail of each of these main headings, with some explanation of the principles that lay behind each part of the program.

Pre-school education, he said, aimed to take the children as soon as they were ready for any social life training, and to put them into three institutions, each of which was designed to provide some social opportunity for young children: the day-nursery, the kindergarten and the playground.

"Before the Revolution these institutions existed for the children of the very rich and the very poor. They were never made available for the great mass of the children. We started that work in 1917. The famine and the Civil War stopped us temporarily. Now we are back at the work again.

"There were two great reasons why these pre-school institutions should be made available for all children. The first reason is that children begin to develop social desires at a very early age. They wish to be with other children. This is plainly impossible in many homes, and for such young children the pre-school institutions provide the child with its sole social opportunity.

"The other reason is equally important—perhaps in view of the immediate needs that we face, more important. The wives of workers and peasants in Russia have always been denied social opportunity. The wives of the bourgeoisie had leisure. The wives of the workers and peasants have been tied to their homes through long hours and days and years of unceasing toil. One of the most practicable methods of relieving the women from this toil is to establish institutions where they can safely leave their children for several hours each day. We must do this if we expect our women to take the part they should in public affairs."

Riappo then turned to the mass school. The plan was to make a school that would accommodate all of the children in the Soviet Union between the ages of 8 and 18. The mass school therefore covered the same ground as

the elementary and high schools in the United States.

"The first section of the mass school gave a social education, in seven school years. This was the labor school designed for all children in the villages as well as in the cities. This labor school was divided into two sections: a lower section of four years and an upper section of three years. Soviet educators were concentrating upon the first, or four year section.

"That gives you an idea of how far we still have to go," Riappo interjected. "We are not deceiving ourselves. It will be at least another year before we are able to provide school accommodations for all of the children in the Ukraine between 8 and 12 years of age. When we have achieved that, we shall go on with the next task—the final three years of the seven year school, and at that point we shall be abreast of the civilized countries of the world—with a place in school for every child of elementary school age. Meanwhile we are continuing with the inadequate equipment we have. It is not good, but it is better than nothing."

There was no specialization in the labor school. It merely aimed to give the children an all-round acquaintance with life. It provided a thorough social education, and gave a synthesis of the elements of general education.

"The foundation of the social education that the labor school is furnishing lies in the children's movement—the organization of the children in the classes, in schools and in groups," Riappo said. "Perhaps the most important part of this movement is the training they get in hygiene, social organization and in politics through the Pioneer movement."

"The Pioneers were organized in 1923. That year there were about 40,000 of them in the Soviet Union. To-day there are more than 300,000, and the number is growing rapidly.

"The Pioneers are the conscious, intelligent children; those that grasp things quickly, and that are able to act up to that understanding. A Pioneer must take an active

part in what is going on about him; he must visit factories and social institutions; he must learn to know the community in which he lives, for he is the builder of a new social order. He declares war on the old society and all of its institutions. It is the Pioneers who will protect what we have won in the Revolution.

"By 1927 or 1928 we hope that practically all of the children in the Soviet Union between the ages of ten and fifteen will be in the Pioneer movement. Thus they will themselves develop the social education they require; they will build from the inside. It will be our duty only to show them what there is to be studied, and to assist them to study it intelligently."

Riappo then passed to the scholastic side of the labor school. It would not study subjects—arithmetic, spelling, reading, geography. That was the work of the old school, where all of the work was subdivided into special topics, and the children never got any synthesis out of the divisions. Many, even among the teachers, did not get this synthesis.

"Education in the new labor school is built around the themes that are taken directly from the life that surrounds the child. School begins in the fall. The children take the topic 'autumn,' discuss it, analyze its meaning, collect leaves and nuts and fruits, organize an autumn fete or festival. For weeks the smaller children think and talk in school about this subject. It is their introduction to education.

"Such things always interest the children. The class work deals with the topics that touch their lives most closely. They talk about the family, the street, the village. Children and teachers plan and work out the lessons together. Each lesson is a part of the general topic they are studying.

"During this process of analyzing the life of the world around them, the children come into contact with three threads that run through all of our problems: Nature; Labor; Society. But instead of beginning the school work

by telling them this, we let them work at the problems until they find the threads.

"We have been working with this system for only a few years, but the experience that we have already had convinces us that the child gets far more by this method than he ever got by the old one. As the system is developed, the child will get a better and better understanding of the life about him.

"You will notice," Riappo continued, "that this system is quite opposed to scholasticism. It is the complex or synthesised system. Under it, the child gets, easily and naturally, an acquaintance with the society in which he lives."

One of the greatest drawbacks to the introduction of this new system in the Ukraine was the lack of trained teachers. The plan was new. It was still in the making. In order to teach successfully under it, the teacher must not only understand the technique, but the principle as well, and more than all, the teacher must have the desire and the ability to experiment in co-operation with the children.

"Our teachers here in the Ukraine are at least as good as the ordinary," Riappo continued. "Each of them is expert in one or more subjects, and the village teachers were on the whole well prepared to teach under the old plan. They know mathematics and history but very few of them have any idea of the relation of one subject to another, and a still smaller proportion has any sense of the relation of these topics to the life around them. We aim, in this new education, to begin with life, and to bring in mathematics and history incidentally, in their proper setting. We have given intensive courses to all of our teachers in this new system. This year we are picking out the most promising among them and giving them a full year of special study in educational method. We expect them to be the propagandists for and the leaders in the new system."

Riappo did not say anything specific about the last

three years of the labor school. It is one of the most difficult educational problems they face, and they are still busy with the first four years.

Labor schools were training grounds for social and general knowledge. They were related to the local environment, but in them all of the children received practically the same general preparation for life. Specialization began with the professional schools.

"We plan to have a professional school for each chief department of work," Riappo explained. "In these schools we propose to train qualified workers. Before we get through, every boy and girl in the Soviet Union will receive this special training as a part of his school course, and will thus prepare himself for his special work in life. Whether in industry, in agriculture, in health work, in art, or in any other field, we intend to have each worker with at least a minimum knowledge of the principles that lie behind the specialty in which he is engaged. The professional school is thus the latter or upper section of the mass school. All of the children are expected to take the work it offers.

"Under the old system there was a dualism in education. There was a classical school and a specialist's school. In the classical school pupils acquired knowledge—often for its own sake. They were the knowers. In the specialists school they acquired a technique. They were the doers. These two groups of pupils belonged to two classes in society. The knowers were the members of the upper classes. The doers were members of the lower classes. This was a form of education fitted to a society that was organized on a basis of class distinction.

"Our society no longer has classes. We are aiming to give every pupil that comes to the school the kind of a training that will best develop his faculties. We do not ask: 'From what social class do you come?' but 'What talents do you possess?' Having found the answer to that question, we provide the kind of training that will give those particular talents the greatest opportunity for social usefulness.

"That is, we are trying to combine the knower and the doer in one person; to unite theory with practice. This education is possible only where there are no social classes. Its basis is social monism—a unified, classless society.

"We are under no obligation to separate knowing and doing because we have abolished class differences. Knowing and doing belong together in a rational life. We are combining them, and training qualified men and women by giving each a general and a specialized education. Such educational monism is possible only in a one class society, and in such a society, no other system will work."

Riappo then took up the struggle that they had been making to establish professional schools in the Ukraine, and the success that had attended their efforts.

"Before the Revolution," he began, "there were about 50,000 children in the gymnasias (high schools). Most of them were the children of the well-to-do. The children of the workers seldom reached that point in the schools. During the year 1924-5 there were 72,000 children in the professional schools of the Ukraine. This fall (1925) we have registered about 92,000. Of these, 23,000 are in factory schools. Most of these children are sons and daughters of the workers.

"Now turn to the rural schools. Before the war there were 74 agricultural schools of professional grade. Most of them were hardly worthy of the name. They never gave any real agricultural training. To-day we have 192 such schools, with 42,000 desyatines of land, with agricultural machinery, and with the necessary equipment for training men and women to go back and carry on scientific farming.

"But many of the young people from the villages cannot get away for the whole year, and so we are opening 270 winter schools this year, for an intensive four months' course. These schools will train the peasants in some special lines of agricultural economics."

Ukrainian industry was growing rapidly, Riappo pointed out. There was a constantly increasing demand

for specialists in all branches of manufacturing, transport and agriculture. There would be 23,000 students turned out by the technical schools this year, but that was not enough to supply the demand. The next few years would undoubtedly see a great industrial expansion, but this presupposed a school system that could provide the necessary trained personnel.

Regarding the higher technical schools—the third division of the Soviet system, Riappo spoke with particular eagerness. This was the field of his special interest. It was in these higher technical schools that he believed the success of the Soviet experiment lay. He said:

"Before the Revolution the dualism in our educational institutions was complete. The universities presented general culture and pure science to the children of the ruling class. From the institutes came trained specialists who lacked the general and theoretical knowledge that the universities were giving to someone else. The result was two men, and neither qualified to be useful in the world. The university student had no specialty, and the student from the institute lacked theoretical knowledge.

"After the Revolution we found that the universities here in the Ukraine were insisting on a perpetuation of this academic dualism. They were not capable of adjusting themselves to the new social period which we were entering. Consequently, in 1920, here in the Ukraine, we passed a law abolishing the universities. We acted just as the French Revolution acted in 1792 when it liquidated 22 universities because they were protecting the old order.

"Because of the part that I played in that campaign, I am called by some in Russia the barbarian that is ruining education. I am not ruining education. I am helping to lay a sound foundation on which alone the new education can be built.

"During the last five years I have been insisting that a degree from a higher educational institution should stand for practice and for usefulness to the community—not for pure science. Science is not an end. It is an instrument,

a tool, that we must use in doing what we need to have done."

Next, Riappo discussed the economic basis for the training that he was advocating. "These higher technical schools," said he, "will train officers who are capable of directing activities on the labor front. There will be schools in each field, and from them will come men and women capable of getting practical results.

"Under the old regime there was a highly trained engineer at the head of an undertaking. Under him there was a mass of workers who were so ignorant that they could not even read and write. We propose:

"Scientific engineers;

"Trained technicians;

"Educated workers.

"This is the economic foundation for the dictatorship of the proletariat. Who should occupy the responsible posts in this organization? The peasants and workers who have created the system, and in whose interest, and by whose authority it is being perpetuated.

"Foreign newspapers blame the Soviet authorities because they keep the bourgeoisie out of the schools. The children of the bourgeoisie are going to these schools in order to acquire the knowledge that will enable them to overthrow the peasants' and workers' government. Why should we train our enemies? Of course we do not let them into the schools while there are not enough places for the children of the workers and peasants. We are engaged in proletarianizing the schools just as we have already proletarianized the industries and the government."

In support of this contention Riappo cited the social position of the students in higher educational institutions of the Ukraine during the past decade. In 1914, 64 per cent of the students were from the aristocracy and the upper bourgeoisie; 30 per cent were from the little bourgeoisie; 4 per cent were from the peasants, and 2 per cent were from the workers. The March revolution

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smashed the aristocracy and the upper bourgeoisie, but it put a new bourgeois class in power, and in 1920, 72 per cent of the student body of the higher schools were from the little bourgeoisie.

"That was the new danger. We had beaten the old order in the factories, in the government and on the military field. Now they were proposing to come back into the schools, and, while keeping out the children of the workers and peasants, secure the training necessary to defeat us in a later struggle.

"That was the danger, and we met it by making provisions under which students who come to our higher schools must have a recommendation from some organization of workers or peasants. Next year we shall be able to fill all of our higher schools by students going directly from the lower schools. The danger of the old ruling class again getting control of the higher schools is practically passed."

Riappo next took up the fourth group among the Ukrainian schools—the institutes. There were now thirty-five of them in the Ukraine, he said. Each was a special working laboratory in some branch of science.

"The students in these institutes are the pick of the higher technical school student body. They are the most promising ones. They will be the generals. They will command on the field of Soviet economic and social life, and there win the fight against the capitalist system of the whole world."

Men and women who enter these institutions, Riappo pointed out, worked for about eight months of the year in the institute. During the other four months they worked in some mine, factory, or other department of industrial or social life that represented their chosen profession. "This," Riappo said, "is our substitute for the former vacation at an aristocratic summer resort.

"When a student gets through school now, he does not get a diploma. Instead, he goes to work for one or two years at his calling. Then, if he proves his worth, he is granted a certificate of proficiency.

"Again and again," Riappo continued, "your papers have said that the Bolsheviks were destroying science. Look around at the work that our young men and women are doing in the scientific laboratories. It is not necessary that a laboratory should be in a university. Chemical laboratories belong in chemical works, and mechanical laboratories in the centres of mechanical industries. In the more advanced countries each great industrial plant is building its own laboratories. That is the logical line of development, and we are following it. To these laboratories, as students and as assistants we send our most promising students and workers. This is our method of preparing scientific experts.

"Combined, these laboratories (institutes) make up the Ukrainian Academy of Sciences. All of these scientific centres do not develop with equal rapidity. Differences in personnel and in timeliness make differences in their rate of progress. Some of them already show great promise: Bio-chemistry, Physics, Geology, Labor. Our ideal is the Pasteur Institute in Paris. But here we are aiming to do for all fields of science what the Pasteur Institute has done for one field. We have not destroyed science. Quite the contrary, we are making real scientific work generally possible by providing the opportunities for carrying it on. What we have destroyed is the dualism between science and scholasticism. We have put science to work."

This, Riappo explained, constituted the school system as far as the children were concerned: the mass school, consisting of the labor school and the professional school; the higher technical schools, in which the officers of industry are trained; the institutes, for training the directors of community life. He then turned his attention to the work of adult education.

"The field of adult education is simpler," said he. "We number our illiterates by millions. These people never had any systematic training of any kind, unless they got in when they learned a trade. Most of them are peasants, and with us farming is neither scientific nor systematic.

To these people we must give political and technical training."

Riappo distinguished four distinct tasks in the field of adult education: (1) the liquidation of illiteracy; (2) providing special technical training for those capable of absorbing it; (3) liquidating the stranglehold of the old religion on the masses; (4) liquidating sectionalism and nationalism. To each of these tasks the educational authorities were devoting themselves, just as specifically as they were devoting themselves to the education of school children. The means were different, however.

The first, and probably the most important means for adult education was the club. These clubs were being established in the cities by labor unions. They were being established in the villages by village councils as centres of village life and culture. They included reading-rooms, libraries, meeting halls, moving-picture machines, social rooms, class-rooms and the like. Already there were 6,000 such clubs in the villages of the Ukraine, and the number was growing rapidly. Said Riappo: "As a result of this club work, supplementing that of the schools, by 1928, every person in the Ukraine between 10 and 35 will be able to read and write."

Technical education for adults was of two kinds: political technical education and mechanical technical education. Night schools and technical schools for adults were supplying the mechanical technical education.

"There are two other agencies of immense importance," Riappo continued. "The press and the cinema. Both are being used in the effort to spread enlightenment among the adult workers who have never had school opportunities.

"The press of the Soviet Union is turning out books by the thousands—cheap books in every field of social and natural science, literature, poetry, drama. These books are being sold in the cities and villages, and they are in thousands of reading rooms all over the Ukraine.

"Then there are the newspapers. We plan to have at least one newspaper in every community. We have al-

ready reached this goal in the larger centres, and we are now working toward it in the smaller ones. You have seen our magazines. They cover every field, and they already have a wide circulation.

"All of these forms of printed matter are under government control. All are being used consciously for the purpose of educating the masses, just as the schools are used for the education of children. Within three years we shall have covered every village in the Ukraine with literature: that means a small library, a reading room where newspapers and magazines are on file, and some provision of books and literature for all of the schools."

Last, but in one sense the most important of the means of adult education, was the cinema. In the Ukraine the cinema as well as the theatre was in the hands of the government.

"Theatres succeed well in the cities," said Riappo, "but they do not go in the villages. Play production on a professional scale is too costly; talent is limited. The cinema works in the villages. It is far more effective than in the cities.

"Our Cinema Trust is poor. In 1924-5 we could afford only 130 sets of apparatus. We kept these in the villages through the year, and they yielded us a profit of over a million rubles. We have put this entire profit into new equipment. This year we have 1600 sets of apparatus. Again we expect to make a profit, and again we shall turn this profit into new equipment. Within a few years we shall have a cinema apparatus in every village. After work and in the winter season the peasant will be able to go to the village club, and for a trifling admission fee he will see the world go past his door. As a part of every exhibition we have an educational film. We expect that this will prove one of the most important factors in the enlightenment of the adult peasant."

Riappo then cited the very great increase in the budgetary provisions for education. "We made our first local and central budget in 1922-3," said he. "It was a feeble

beginning. This year our total budget is over five times what it was in 1922-3. In this new budget, 48 per cent of the central government appropriations and 30 per cent of the local appropriations are for education. Salaries of village teachers are nearly four times what they were in 1922-3; salaries of professors in higher institutions are more than four times as high.

"We were pessimists in 1922-3. We did not see how we should be able to advance. But we persevered. Now we have demonstrated our ability to go ahead on the industrial field; on the education field; on the field of social reconstruction. We are moving forward rapidly. Workers in the schools see their salaries and their conditions of work improving month by month. They now believe that they have a unique educational opportunity. Even some of the old professors in higher institutions, who felt that everything was lost, are waking up to the fact of this new life. Our state is rich in iron, coal, water-power, sugar. Germany and Czecho-Slovakia, with their great technical development, are our near neighbors. One day, economically, we shall leap instead of stepping. This is the promise of our economic development. When that day dawns, education will move ahead as rapidly as industry."

Riappo is a propagandist, of course. He has a cause in which he believes whole-heartedly—the education of every person, old as well as young, in the Ukraine. He has a method for accomplishing this result. In the working out of this method he has availed himself of the entire educational experience of the modern world, and to this borrowed knowledge he has added nearly a decade of experimentation in the Soviet Union. Few precedents hamper him and his fellow workers in education. They are building from the bottom. The result of their labor promises to be an educational system that is as unique in its structure as it is prophetic in its method.

XIII. SOCIALIZING CULTURE.

Throughout this statement of what I saw and heard in the schools of the Soviet Union, I have made no general comment on the social principles underlying the Soviet system. I have done this deliberately, because I wished it to be clear that it was schools that I was describing and not Bolshevism. It is impossible to complete any statement on Soviet education, however, or to understand what is going on in the educational institutions of the Soviet Union without some general concept of Soviet social philosophy. In the chapter on "Higher Education for Workers" I suggested certain characteristics of this philosophy, and in the Riappo interview (Chap. 15. *Unifying Education*) it is developed and applied to the educational program of the Ukraine. At this point, therefore, I should like to sum up some of its main tenets in four or five dogmatic sentences:

1. Written history is a record of class society. That is:
 - a. A small, organized, enlightened ruling class, enjoying economic surplus and leisure (culture); and
 - b. A large, unorganized, ignorant working class (slaves, serfs, wage-earners) producing the surplus and the leisure enjoyed by the ruling class.
 - c. The power of exploitation, in such societies, lies in the ownership, by the ruling class, of the means of livelihood,—the body of the slave; the land of the serf or peasant; the machines of the wage-earner.
 - d. This economic power, based on ownership of the means of production, extends through all social institutions, so that the economic ruling class controls also the state, the church, the school, the press, etc.
2. Class society, like all other social forms, undergoes a process of change, or evolution. Social history is the story of this evolution.
3. Historically a time will be reached when the workers, organized and enlightened, will take possession of the land and machines upon which their livelihood depends. At that point in social history, exploitation will cease, because the economic basis for exploitation (the ownership of the means of livelihood by a separate

group or class) will no longer exist. When the workers own and control the land, the machines and the other productive forces and implements, there will no longer be an economic division of society into owners and workers. The owners will be the workers, and the economic foundation for class differences will therefore have disappeared.

4. This shift in social control from an owning, ruling class to a working, ruling class is a social revolution. After the social revolution occurs, the workers, instead of producing surplus and leisure for a ruling class, will share industrial product and leisure among themselves.
5. Such a social revolution is now under way in the Soviet Union. The workers do own and control the land. They are the ruling class. This fact is proved since, in the Soviet Union, as nowhere else in the world, leisure (culture) is being socialized.

Readers may not believe a word of this statement. The point is that Soviet thinkers and workers by the tens of millions do believe in it and act on it. It is the core of their social philosophy, and also the animating principle of their internal organization of the state and of the educational system. Unless this is understood, the reader can have no clear perspective on the changes that are now taking place in the realm of Soviet education.

Soviet educators, pursuant of this theory, are trying to work out ways in which the masses in the Soviet Union can get their share of leisure (culture), in return for their share of production (work). Three very specific problems are involved: (1) Making it economically and socially possible for the new generation (namely, the children of the present generation of Soviet peasants and workers) to share educational opportunity in relation to ability, and not, as heretofore, in relation to social class. (2) Opening the current culture life of the world to the workers. (3) Making past culture free to all.

How well are the Soviet educational authorities succeeding in their endeavor to provide education in accordance with ability? It is as yet too early to answer that question with any assurance, but certainly the observations recorded in the preceding pages will indicate that, as compared with the pre-revolutionary Russia, they have taken immense strides in this direction.

British Trade Union delegates felt justified in going further than this, and in stating that the Soviet worker of 1924-1925 was not only far better off educationally than Russian workers before the Revolution, but that he was then well in advance of the British workers, in so far as his educational opportunities were concerned:

"From the above necessarily inadequate review of the Soviet educational system it will be realized that every opportunity and encouragement is given to the worker, no matter what may be his or her calling, to obtain the best instruction in any branch of art, industry, science or literature, for which he may feel he has an aptitude. The results which were seen by the delegation in all the districts visited were certainly astounding, especially when it is considered that the whole system has not yet been in operation for three years. Many of these workers had no intention of leaving the factory in which they had worked all their lives, or altering their lives in any way. The training they had received in the optional schools or other institutions had, however, given them an entirely new outlook on life and made their leisure hours a pleasure. Others were by these means enabled to quit an irksome and routine job for a profession to which their talents and bent fitted them. A peasant or a worker can by his own energies rise in his or any other profession with the aid given to him by the system. The pathetic feature in our own civilization of wasted and dormant talent, the slave of circumstance, owing to the absence of all possibility of outlet or instruction through lack of means, seems likely to become very rare among the workers of Russia." (Russia Today, Report of the British Trade Union Delegation, 1924. New York, 1925, p. 150.)

This is not conclusive, of course. It was not intended to be. But it is very suggestive of what a workers' society can do after three or four years of effort, to provide educational opportunity for the mass of its members.

On the other two points,—the opening of current culture life to the workers, and making past culture available

—I am not competent to write, except in the most general terms. A word on each head must suffice.

There are four chief modes of current culture expression: literature (the press); music; drama; the pictorial and plastic arts. All of these forms were well developed in Russia before the Revolution. The country was famous for its scientists, its men of letters, its musicians, its singers, its dramatists, its dramatic artists and its painters. But most of their work was of necessity done for the ruling classes of Russia. Four-fifths of the Russian people could not even read, so that the printed page was sealed to them; music, drama, opera, pictures were for the highly placed. With the exception of religious music and art, practically none of these culture forms reached the masses.

To-day this situation is reversed. The Soviet campaign against illiteracy has been one of the most spectacular, and on the whole one of the most successful of the endeavors of Soviet authorities to bring current culture to the masses. The publication of books, pamphlets and magazines is being developed on a vast scale. The State Publishing House (Gosizdat) is the largest publishing plant in the world. The number of new books and pamphlets registered and printed in the Soviet Union in 1923 was 18,608; in 1924 it was 29,131, and in 1925, about 40,000. The average size and the average circulation of books has increased rapidly since 1921. Machinery for distribution is being built up, and book stalls and reading quarters can be found throughout the Soviet Union.

Soviet newspapers have developed rapidly. In make up, and in the type of material which they carry, the best of them will compare favorably with the very best of the European dailies. They outclass the American press completely. In the Soviet Union it is not at all uncommon to find a city of a quarter of a million with a newspaper that is well up to the level of the best American metropolitan dailies. Everywhere they are as free from sensationalism and scandal as is the London Times.

Magazine development has lagged behind that of the newspapers. During the past two years, in that field also, great strides have been made, particularly by the trade unions.

The Soviet system of club, factory, and village reading rooms is already established on a scale which has no parallel anywhere else in the world. And it is expanding rapidly.

One of the most unique forms of culture expression is the rab-cor and the wall newspaper. A rab-cor is a worker who acts as correspondent for a daily, weekly or monthly paper. Newspaper and magazine managers aim to have such a correspondent in each factory, mine, shop, office and village in their constituency. The *Pravda* of Moscow, for example, which has a daily circulation of half a million, claims 10,000 such correspondents; receives from one hundred to two hundred communications per day from them; maintains an editorial department which edits and prepares these communications for publication, and pays very well for everything that it uses. The wall newspaper is a big sheet, usually about a yard wide and two or three yards long on which are written, typed, drawn, pasted or printed the sections of a complete newspaper,—news, editorial comment, humor, cartoons, fiction, poetry. Such newspapers are intended to serve a department in a factory, a club, a school, an office. They are therefore intensely local in character. The work is done by local talent; the newspaper is made up once a week, or once in two weeks, and tacked up in a prominent place where all may read it. Between the rab-cors and the wall newspapers, it is literally true that hundreds of thousands of Soviet workers and peasants are writing for the papers, and are having their product appear in print. As a means of mass culture expression, this development is quite unparalleled.

These facts are easy to observe. They can be stated in figures, verified and checked. What can be said of music; of the drama; of opera; of the pictorial and plastic

arts? Nothing very definite as yet, and certainly nothing very effective by an amateur, except that:

1. Amateur vocal and instrumental music and amateur drama are being encouraged and developed in the club, the factory, the village people's house, the army, the Young Communist organizations and the Pioneer groups.
2. Schools of music, drama and art are maintained on a high level and are crowded with students. In these schools, as elsewhere in the Soviet Union, it is the children of peasants and workers—of the masses—who receive first consideration.
3. Professional music and drama are maintained on a level that I have never heard nor seen excelled anywhere in the world.
4. A revolution has occurred in the character of the people who hear the music and see the drama. The bulk of them are workers, who get tickets at greatly reduced rates through the unions. The audiences are quiet, extremely attentive, undemonstrative and rigidly self-disciplined. Performances begin exactly on time. The moment a number or an act is started, the doors close, and no one else gets in until the number or the act is concluded. Whispering, disturbance, untimely applause are all dealt with immediately and effectively by the members of the audience, who have come to see and to hear. There is scarcely a trace of the late-arrival, the inattention and the indifference that are so frequently met with in the leisure class audiences of western European capitals. Certainly the masses are attending the concerts and seeing the dramas. It is hard to get tickets for anything of repute. What the net social effect will be the future must decide.

In the case of past culture, the story is simpler and clearer. All the art treasures of the Soviet Union have been socialized. They are being classified by large corps of experts, and as fast as space can be found for them they are being put on exhibition in libraries, galleries and museums.

Sir Martin Conway, a British art expert who has just published a book on "Art Treasures in Soviet Russia," deals with the subject in this way:

"The public museums of Russia, the Hermitage in Petersburg (Leningrad) and the museums in Moscow are of old-standing fame. I knew what to expect. But the wealth of the Czars, in palaces and in every kind of treasure within them, far surpassed all my expectations, and now, as I look back, there sparkle and shine in my memory incredible quantities of jewels, masses of plate,

measured rather by tons than by numbers, countless quantities of porcelains, filling gallery after gallery, and leaving yet 75,000 pieces for which exhibition rooms cannot be found. I also recall great vases and tables and even walls of lapis lazuli and malachite, statues and busts, antique and modern, upwards of 20,000 pictures, vast collections of drawings and engravings, endless suites of furniture, walls covered with tapestries and carpeted floors by the acre, ikons by the thousands, sheeted with embossed covers of silver gilt and enamel, antiques of all periods, including some 10,000 objects of gold yielded up from the soil of South Russia, state carriages and armor, vestments and robes heavy with pearls, books in golden bindings, chalices and crystal cups, engraved gems, crowns and sceptres and historical costumes, libraries of illuminated manuscripts and early printed books, and every object that the genius of man has brought into existence and his decorative instincts have embellished." (pp. 21-2.)

The author then tells how, for three months, he was permitted to examine these treasures, alone, by day or night, at his pleasure. He had passes that took him everywhere, and gave him every facility. He saw these things, handled them, appraised them.

While wandering through the palaces and the galleries, he could not help asking himself how "such a mass of treasure should have passed safely through an unparalleled revolution. Some loss there must have been, but it was trifling" (p. 23). Then he points out that the Winter Palace was taken by storm; that there was fighting in the Palace of Gatchina, and that the Kremlin was bombarded. Crowds entered the palace rooms. Soldiers and workers fought there. When the storm had passed, the caretakers were unable to determine that anything had been stolen.

"It was far otherwise in France in 1789. How few of the contents of the Royal and Ecclesiastical treasures in that country now survive. Where is the treasure of St. Denis, of Rheims, or of Chartres? Hardly any of the

works of French goldsmiths of the eighteenth century escaped the melting pot. Ruin overtook the great abbeys and many of the noblest examples of mediæval architecture were leveled to the ground. In Russia nothing of the kind has happened. The monasteries, indeed, have been suppressed and their property confiscated, but so far from being injured, their paintings, their vestments, their jewels and embroideries have been carefully gathered together and many of them saved from the progressive decay which they were suffering. They are better cared for by the Soviet Government than they were by the monks." (pp. 23-24.)

Like the other treasures that have come into the hands of the Soviet authorities, all the material from the monasteries has been carefully sorted "and studied by the most competent experts" (p. 33). When this work of classification is completed, the material will all be placed on exhibition in a number of public museums of religious art. Two of these museums have already been established.

Readers must not conclude from these statements that Sir Martin is a Bolshevik. On the contrary, his hostility to the Bolshevik regime is obvious enough all through the book. The interesting point is that so long as he remains in his own field, namely, art, he is overcome with wonder at the immensity of the treasure which the Soviet authorities have preserved and are preparing for exhibition.

He explains lucidly (p. 25) the Soviet theory, that all art objects of social value are social property. But he fails to understand that this very fact has protected them through the whole period of war, civil strife and famine.

One interesting point he observed was that very generally the men and women who were formerly custodians of the art objects were retained in their places. The art has been preserved. The same guardians are still protecting it. But they are now protecting the property of the people and not that of the Czar.

I do not know Sir Martin Conway, but he writes as though he understood his field well. I had not his oppor-

tunities to see the art treasures of Soviet Russia, and so I have no way of checking up on his descriptions, but those that I did see bear his statements out in every detail. Soviet galleries and museums are overcrowded with material. That is inevitable at the moment. But, with this exception, I never saw public buildings of this type that were better arranged or that were cared for with more exacting attention. And that applies to the crowds who frequent the galleries as well as to the caretakers.

Work on the culture treasures of the Soviet Union must go on for many years. When it is completed the workers and peasants of the Union will have on exhibition the most remarkable collection of art objects in the world.

One central principle runs through the handling of culture material by the Soviet authorities: it must be socialized. That is, it must be open to those who can appreciate and utilize it. This principle holds true for the students who apply for admission to the schools of art and drama. It is true of the distribution of tickets to concerts and operas. It underlies the organization of material in libraries and museums. Current culture belongs to the people of the Soviet Union. Every object that carries the story of the past is carefully preserved and exhibited in its appropriate place in the scheme of social history.

All over the Western world leisure and culture have generally been open to the ruling class and closed to the workers. In the Soviet peasants' and workers' state, peasants and workers (and their children) are enjoying these advantages. This socialization of culture is the basis on which all Soviet education is organized. It is one of the most remarkable social experiments ever undertaken in the history of modern society. To use an oft-quoted phrase (of Lester F. Ward) it is an attempt at "the conscious improvement of society by society." It is the socialization of knowledge and of human achievement.

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